

## PARAMELANIA NASSA (Woodward.)

In my previous paper (P. Z. S. 1881, p. 292) I have remarked upon three forms of this species—the typical as described by Woodward, the larger variety sent by Dr. Kirk, and a small few-ribbed one collected by Mr. Thompson. A further investigation of these, based on the specimens kindly sent me by Mr. Damon, makes it somewhat doubtful whether, instead of the one species, they should not be rather regarded as three. At all events they are so readily distinguishable that I propose to give varietal names to them respectively, namely var. *grandis* (P. Z. S. 1881, pl. xxiv. figs. 26, 26a) and var. *paucicostata* (fig. 26b). The former not only exceeds the typical form in size, but the columella appears to be always slightly sub-truncate at the base. The latter is a shorter shell, with a smaller and more acute spire; and the plicæ are considerably fewer than usual.

## 6. List of Birds recently collected by Dr. Kirk in Eastern Africa. By Captain G. E. SHELLEY, F.Z.S.

[Received March 23, 1881.]

(Plate LII.)

Dr. Kirk has kindly forwarded to me no less than seven collections of birds from the little-explored regions of Eastern Africa, from the following localities :—

A collection from Lamo, in 2° S. lat.

A collection from Melinda, in 3° S. lat.

Three collections from the Usambara country, from the valley of the Pangani river, labelled respectively "Pangani," "Usambara hills," "Usambara mountains."

A collection from Ugogo, about 200 miles due west from Zanzibar.

A collection from Dar-es-Salaam.

In the following paper, which gives an account of these collections, I shall follow the classification employed by Drs. Finsch and Hartlaub in their standard work 'Die Vögel Ostafrikas.' I have added a few notes to indicate the geographical distribution of each species in the Ethiopian region.

### 1. GYPOHIERAX ANGOLENSIS.

*Gypohierax angolensis* (Gm.), Finsch & Hartl. Vög. Ostafr. p. 77; Sharpe, Cat. B. i. p. 312.

Usambara hills.

Hitherto this species has only been recorded as East-African from the island of Pemba, in the same latitude. It also ranges throughout the entire West-African region, from Senegal to Angola.

### 2. SPIZAËTUS BELLICOSUS.

*Spizaëtus bellicosus* (Daud.), Finsch & Hartl. Vög. Ostafr. p. 47; Sharpe, Cat. B. i. p. 265.

Usambara mountains.

Rare in Eastern Africa, where it has previously only been recorded from the island of Zanzibar. Its range appears to be East Africa southward from the Usambara country, and South Africa, where it becomes rarer in the western districts.

### 3. LOPHOAËTUS OCCIPITALIS.

*Spizaëtus occipitalis* (Daud.), Finsch & Hartl. Vög. Ostaf. p. 50; Fischer & Reichenow, J. f. O. 1878, p. 251; Fischer, J. f. O. 1879, pp. 276, 292.

*Lophoaëtus occipitalis*, Sharpe, Cat. B. i. p. 274.

Usambara hills.

Dr. Fischer found it abundant from Melinda, round Formosa Bay, to Witu. It inhabits the whole of Africa south of about 17° N. lat.

### 4. CIRCAËTUS CINEREUS.

*Circaëtus cinereus* (Vieill.), Finsch & Hartl. Vög. Ostaf. p. 54; Sharpe, Cat. B. i. p. 282.

Usambara mountains.

It inhabits the whole of Africa south of about 16° N. lat.

### 5. BUTASTUR RUFIPENNIS.

*Buteo rufipennis*, Strickl. P. Z. S. 1850, p. 214, pl. 22.

*Poliornis rufipennis*, Sundev., Heugl. Orn. N.O.-Afr. p. 95.

*Butastur rufipennis*, Sharpe, Cat. B. i. p. 299.

Pangani.

This is the most southern limit whence the species has been recorded. It ranges northward to Kordofan.

### 6. FALCO CUVIERI.

*Falco cuvieri*, Smith, Sharpe, Cat. B. i. p. 400.

Lamo.

New to East Africa. This rare species was formerly only known from South and West Africa.

### 7. BAZA VERREAUXI.

*Baza verreauxi* (Laf.), Sharpe, Cat. B. i. p. 354.

*Avicida orientalis*, Fischer, J. f. O. 1879, p. 292.

*Avicida verreauxi*, Fischer & Reichenow, tom. cit. p. 339.

I recently procured a specimen of this rare Cuckoo-Falcon from a small collection made by the Rev. Thomas Wakefield at Rabbai, near Mombas. Dr. Fischer collected it at Muniuni. It ranges along the bushy coast-land of East Africa, as far south as Natal.

### 8. ASTURINULA MONOGRAMMICA.

*Asturinula monogrammica* (Temm.), Finsch & Hartl. Vög. Ostaf. p. 59; Sharpe, P. Z. S. 1873, p. 711; id. Cat. B. i. p. 275; Nicholson, P. Z. S. 1878, p. 354; Cab. J. f. O. 1878, p. 242; Fischer

& Reichenow, tom. cit. pp. 251, 272 ; Fischer, J. f. O. 1879, p. 292 ; Gurney, Ibis, 1881, p. 124.

*Asturinula meridionalis* (Hartl.), Sharpe, Cat. B. i. p. 277.

Pangani river ; Dar-es-Salaam.

This appears to be the commonest Hawk in Eastern Africa. It ranges on the east coast from Abyssinia to the Zambesi, and on the west coast from Senegal to Damaraland.

I agree with Mr. Nicholson (*l. c.*) in not considering *A. meridionalis* (Hartl.) to be distinct ; or I should refer the specimens before me to that race.

#### 9. ASTUR POLYZONOIDES.

*Nisus badius* (part.), Finsch & Hartl. Vög. Ostafri. p. 81.

*Astur polyzonoides* (Smith), Sharpe, Cat. B. i. p. 113.

Dar-es-Salaam. One immature specimen.

This species has hitherto only been recorded from South Africa, where it is chiefly confined to the northern portion, from the Zambesi to Benguela.

#### 10. CIRCUS ÆRUGINOSUS.

*Circus aeruginosus* (Linn.), Sharpe, Cat. B. i. p. 67.

Usambara hills. A fine adult male.

This is the first time the Marsh Harrier has been collected in East Africa. It ranges throughout the whole of the African continent, having been recorded from Natal and Angola ; but is of rare occurrence south of the equator.

#### 11. GLAUCIDIUM PERLATUM.

*Glaucidium perlatum* (Vieill.), Sharpe, Cat. B. ii. p. 209.

Ugogo.

Mr. Sharpe (*l. c.*) gives as the range of this species "the whole of Africa south of the Sahara, excepting the forest-regions of the west and east coast."

This species is here recorded for the first time from East Africa north of the Zambesi. Ugogo is inland of the forest-region of the Zanzibar coast.

#### 12. GLAUCIDIUM CAPENSE.

*Athene capensis*, Smith, Finsch & Hartl. Vög. Ostafri. p. 98.

*Glaucidium capense*, Sharpe, Cat. B. ii. p. 223 ; Nicholson, P. Z. S. 1878, p. 354.

Dar-es-Salaam.

It ranges apparently throughout South Africa, and extends northward on the east coast to Dar-es-Salaam.

#### 13. BUBO MACULOSUS.

*Bubo maculosus* (Vieill.), Finsch & Hartl. Vög. Ostafri. p. 103 ; Sharpe, Cat. B. ii. p. 30.

Lamo ; Usambara hills.

New to the Zanzibar district. Compared with Natal examples, these specimens agree perfectly; and I think Drs. Finsch and Hartlaub's reference (*l. c.*) should properly be referred to the present species, although Mr. Sharpe (*l. c.*) includes it as a synonym of *B. cinerascens*, Gnér. I cannot now venture to offer an opinion upon the specific value of *B. cinerascens*, and can therefore only assign as the range of *B. maculosus* the whole of South Africa and East Africa as far north as Lamo.

#### 14. SCOPS CAPENSIS.

*Scops capensis* (Smith), Cab. J. f. O. 1878, p. 241.

Dar-es-Salaam.

This species was first collected in East Africa at Kitui, in Ukamba, by Dr. Hildebrandt, whence it ranges throughout Africa south of the equator, and in Western Africa extends as far north as the Gold Coast. North of these limits it is replaced by *S. giu.*

#### 15. SYRNIUM WOODFORDI.

*Syrnium woodfordi* (Smith), Finsch & Hartl. Vög. Ostafri. p. 108; Sharpe, Cat. B. ii. p. 267; Fischer & Reichenow, J. f. O. 1878, p. 251; Fischer, tom. cit. p. 273: id. J. f. O. 1879, pp. 289, 290; Fischer & Reichenow, tom. cit. p. 340; id. J. f. O. 1880, p. 140; Fischer, tom. cit. p. 188.

Pangani.

Dr. Fischer procured it at Witu, Muniuni, and Zanzibar. It ranges from Abyssinia throughout the whole of East and South Africa.

#### 16. CAPRIMULGUS MOSSAMBIKUS.

*Caprimulgus mossambicus*, Peters, J. f. O. 1868, p. 134; Sharpe, New ed. Layard's B. S. Afr. p. 88.

*Caprimulgus fossei*, Finsch & Hartl. Vög. Ostafri. p. 123, pl. i.; Fischer, J. f. O. 1877, pp. 208, 423; Cab. J. f. O. 1878, p. 236; Fischer & Reichenow, tom. cit. p. 256; Fischer, J. f. O. 1879, p. 300; Fischer & Reichenow, tom. cit. p. 344.

Lamo; Melinda; Pangani; Usambara hills; Usambara mountains; Ugogo; Dar-es-Salaam.

This is apparently a common bird in the Zanzibar province. It is, I believe, confined to East Africa, where it ranges as far south as Tete, on the Zambezi.

#### 17. COSMETORNIS VEXILLARIUS.

*Cosmetornis vexillaris* (Gould), Finsch & Hartl. Vög. Ostafri. p. 129.

Ugogo.

This species ranges from the Upper White Nile district throughout East Africa to the Zambezi; is found in Madagascar and in South-west Africa, extending from Damaraland to Malemba, near the mouth of the Congo.

## 18. HIRUNDO RUSTICA.

*Hirundo ruistca* (Linn.), Finsch & Hartl. Vög. Ostafri. p. 134 ; Sharpe, P. Z. S. 1870, p. 305 ; Sharpe & Dresser, tom. cit. p. 244 ; Fischer, J. f. O. 1877, p. 180 ; Cab. J. f. O. 1878, p. 222 ; Fischer, J. f. O. 1879, pp. 292, 293 ; Fischer & Reichenow, tom. cit. p. 344.

*Cecropis rustica*, Cab. J. f. O. 1878, p. 208.

Lamo ; Pangani river ; Ugogo.

It ranges throughout Africa as a migrant, following the summer season.

## 19. HIRUNDO MONTEIRI.

*Hirundo monteiri*, Hartl., Finsch & Hartl. Vög. Ostafri. p. 139 ; Sharpe, P. Z. S. 1870, p. 316 ; 1873, p. 713 ; Cab. J. f. O. 1878, p. 222 ; Fischer & Reichenow, tom. cit. p. 257 ; Fischer, tom. cit. p. 280 ; id. J. f. O. 1879, p. 279 ; Fischer & Reichenow, tom. cit. p. 344.

Pangani ; Usambara hills.

It ranges in East Africa from Mombas to the Zambesi, and on the west coast from Damaraland to the Congo.

## 20. HIRUNDO PUELLA, Temm.

*Hirundo puella*, Finsch & Hartl. Vög. Ostafri. p. 140 ; Sharpe, P. Z. S. 1870, p. 319 ; 1873, p. 713 ; Cab. J. f. O. 1878, p. 222 ; Fischer & Reichenow, tom. cit. p. 257 ; Fischer, tom. cit. p. 280 ; id. J. f. O. 1879, p. 302 ; Fischer & Reichenow, tom. cit. p. 344.

Malinda ; Usambara hills ; Dar-es-Salaam.

This is a migratory species, common, according to Dr. Cabanis (*l. c.*), about Mombas from April to December, and breeding there. It ranges throughout East Africa from Abyssinia to Natal, where I have received several specimens from the neighbourhood of Durban. On the west coast it has been collected on the Cunene river in Benguela, and extends northward to Fantee, where I found it very abundant in February and March.

## 21. EURYSTOMUS AFER.

*Eurystomus afer* (Lath.), Finsch & Hartl. Vög. Ostafri. p. 150 ; Sharpe, Ibis, 1871, p. 274 ; id. P. Z. S. 1873, p. 712 ; Nicholson, P. Z. S. 1878, p. 354 ; Cab. J. f. O. 1878, p. 234 ; Fischer & Reichenow, tom. cit. p. 255 ; Fischer, tom. cit. p. 287 ; id. J. f. O. 1879, p. 291 ; Fischer & Reichenow, tom. cit. p. 243 ; Gurney, Ibis, 1881, p. 124.

Usambara monntains ; Dar-es-Salaam.

This species ranges throughout the whole of East Africa, from Kordofan to the Zambesi, and on the west coast from Senegal to Angola. I have examined a specimen collected by Mr. Oates, probably from the Matabili country ; but the exact locality was not recorded upon the label.

## 22. CORACIAS GARRULA.

*Coracias garrula*, Linn., Finsch & Hartl. Vög. Ostafri. p. 152; Sharpe, Ibis, 1871, p. 189; id. P. Z. S. 1873, p. 712; Cab. J. f. O. 1878, p. 234; Fischer, J. f. O. 1879, pp. 291, 303; Fischer & Reichenow, tom. cit. p. 343; Gurney, Ibis, 1881, p. 124.

Usambara mountains.

This species ranges throughout the entire African region, but migrates northward of the tropics about May.

## 23. CORACIAS CAUDATA.

*Coracias caudata*, Linn., Finsch & Hartl. Vög. Ostafri. p. 154; Sharpe, Ibis, 1871, p. 194; id. P. Z. S. 1873, p. 712; Fischer, J. f. O. 1877, p. 178; Nicholson, P. Z. S. 1878, p. 354; Cab. J. f. O. 1878, p. 234; Fischer & Reichenow, tom. cit. p. 254; Fischer, J. f. O. 1879, pp. 283, 291; Gurney, Ibis, 1881, p. 124.

Pangani; Usambara mountains; Dar-es-Salaam.

This is a common bird, and very generally distributed throughout East Africa, extending as far north as Bogue, near the southern extremity of the Victoria Nyanza, where it has been collected by Captain Speke. It also ranges over the whole of South Africa and Angola.

## 24. CORACIAS NÆVIA.

*Coracias nævia*, Daud., Sharpe, Ibis, 1871, p. 190.

Dar-es-Salaam.

This species ranges throughout Africa south of about 17° N. lat., but is here recorded for the first time from East Africa.

## 25. HAPALODERMA CONSTANTIA.

*Trogon narina* (part.), Finsch & Hartl. Vög. Ostafri. p. 155; Fischer & Reichenow, J. f. O. 1878, p. 253; Fischer, J. f. O. 1879, pp. 288, 289; Fischer & Reichenow, tom. cit. p. 342; Gurney, Ibis, 1881, p. 124.

*Hapaloderma constantia*, Sharpe & Ussher, Ibis, 1872, p. 281.

Melinda; Usambara mountains.

These two specimens agree perfectly with one of the types of *H. constantia* in my own collection.

This race, as yet only recorded from Fantee and the Zanzibar coast, is, I suspect, the one which inhabits North-eastern Africa, *H. narina* (Vieill.) being probably confined to South Africa. Jointly these races inhabit the whole of Africa south of the equator, and extend northward to Ailet on the Red Sea and to Fantee on the west coast.

## 26. HALCYON SENEGALOIDES.

*Halcyon senegaloides*, Smith, Sharpe, Monogr. Alced. p. 187, pl. 68; Cab. J. f. O. 1878, p. 235.

*Halcyon irroratus*, Reichenb., Finsch & Hartl. Vög. Ostafri. p. 159; Fischer & Reichenow, J. f. O. 1878, p. 258; Fischer, tom.

cit. p. 288; id. J. f. O. 1879, p. 293; Fischer & Reichenow, tom. cit. p. 343.

Lamo; Melinda; Pangani.

This species ranges from Lamo to Port Natal.

#### 27. HALCYON SEMICÆRULEA.

*Halcyon semicærulea* (Forsk.), Sharpe, Monogr. Alced. p. 173, pl. 64; Finsch & Hartl. Vög. Ostafri. p. 160; Sharpe, P. Z. S. 1873, p. 712; Fischer, J. f. O. 1877, pp. 172, 180; Cab. J. f. O. 1878, p. 235; Fischer & Reichenow, tom. cit. p. 255; Fischer, J. f. O. 1879, pp. 293, 303.

Pangani.

In East Africa this Kingfisher has not yet been recorded from any locality between Zanzibar and the Zambesi; but I have had the opportunity of examining a specimen collected by Mr. Oates from South-eastern Africa, between Tati and the Victoria falls of the Zambesi.

This species ranges from 16° N. lat. to about 21° S. lat.; but is only met with as a straggler towards its southern limits.

#### 28. HALCYON ORIENTALIS.

*Halcyon orientalis*, Peters, Sharpe, Monogr. Alced. p. 181, pl. 66; Finsch & Hartl. Vög. Ostafri. p. 162; Fischer & Reichenow, J. f. O. 1878, p. 255; Fischer, tom. cit. p. 288; id. J. f. O. 1879, p. 293; Gurney, Ibis, 1881, p. 124.

Lamo.

This species ranges throughout East Africa from Lamo to the Zambesi. Some specimens in my own collection from the Zambesi approach so nearly in their plumage to the common *H. albiventris* of Natal that it is not without hesitation that I keep *H. orientalis* and *H. albiventris* as distinct species.

They appear to me to be local varieties which lose their characters towards the confines of their respective habitats, as, for instance, between the Zambesi and the Transvaal.

#### 29. HALCYON CHELICUTENSIS.

*Halcyon chelicutensis* (Stanley), Sharpe, Monogr. Alced. p. 182, pl. 67; Finsch & Hartl. Vög. Ostafri. p. 163; Sharpe, P. Z. S. 1873, p. 712; Fischer, J. f. O. 1877, pp. 171, 172, 176; Nicholson, P. Z. S. 1878, p. 354; Fischer & Reichenow, J. f. O. 1878, p. 255; Fischer, tom. cit. p. 288; id. J. f. O. 1879, pp. 293, 303; Fischer & Reichenow, tom. cit. p. 344; Gurney, Ibis, 1881, p. 124.

*Halcyon variegatus*, Cab. J. f. O. 1878, p. 235.

Melinda; Pangani; Usambara mountains.

It ranges from about 16° N. lat. to 30° S. lat.

#### 30. CORYTHORNIS CYANOSTIGMA.

*Corythornis cristatus*, Sharpe, Monogr. Alced. p. 35, pl. 11 (1869).  
*Alcedo cristata*, Finsch & Hartl. Vög. Ostafri. p. 167; Fischer,

J. f. O. 1877, p. 207; Cab. J. f. O. 1878, p. 235; Fischer & Reichenow, tom. cit. p. 255; Fischer, tom. cit. p. 288; id. J. f. O. 1879, p. 293.

*Corythornis cyanostigma* (Rüpp.), Sharpe, Monogr. Alced. p. vi (1871).

Pangani; Usambara hills.

This species is not uncommon from Mombas to Zanzibar, and is probably evenly distributed throughout East Africa. It ranges over the entire African continent south of about 15° N. lat.

It appears to me strange that the correct name for this species should be so generally overlooked by recent writers.

### 31. ISPIDINA PICTA.

*Ispidina picta* (Bodd.). Sharpe, Monogr. Alced. p. 141, pl. 51.

*Alcedo picta*, Finsch & Hartl. Vög. Ostafri. p. 171; Cab. J. f. O. 1878, p. 235; Fischer & Reichenow, tom. cit. p. 256; Fischer, tom. cit. p. 288.

Dar-es-Salaam.

From Dar-es-Salaam, its southern limit on the east coast, it ranges northward into Abyssinia, and extends over the entire west coast from Senegal to the Quanza river in Angola.

### 32. CERYLE RUDIS.

*Ceryle rudis* (Linn.), Sharpe, Monogr. Alced. p. 61, pl. 19; Finsch & Hartl. Vög. Ostafri. p. 175; Fischer, J. f. O. 1877, p. 425; Nicholson, P. Z. S. 1878, p. 355; Cab. J. f. O. 1878, p. 235; Fischer & Reichenow, tom. cit. p. 255; Fischer, tom. cit. p. 289; id. J. f. O. 1879, p. 293.

Pangani river; Dar-es-Salaam.

This species ranges throughout the entire African continent.

### 33. MEROPS APIASTER.

*Merops apiaster*, Linn., Heugl. Orn. N.O.-Afr. p. 195.

Dar-es-Salaam.

The Common Bee-eater is here recorded for the first time from East Africa. It ranges over the whole of Africa, but everywhere occurs only on migration.

### 34. MEROPS SUPERCILIOSUS.

*Merops superciliosus*, Linnaeus, Finsch & Hartl. Vög. Ostafri. p. 178; Fischer, J. f. O. 1877, p. 177; Nicholson, P. Z. S. 1878, p. 355; Cab. J. f. O. 1878, p. 235; Fischer & Reichenow, tom. cit. p. 256; Gurney, Ibis, 1881, p. 125.

Pangani; Melinda; Dar-es-Salaam.

This species is undoubtedly distinct from *M. aegyptius*, Forsk., which latter bird has often been referred to as the adult summer plumage of the present species; and, owing to this error, I cannot venture to define accurately their geographical distribution. The present species certainly ranges throughout the whole of East and

South Africa, Madagascar, and the Comoro Islands; while *M. aegyptius* as certainly ranges throughout North Africa, and extends southward to Durban, in Natal; but it appears to be by far the rarest of the two species south of the equator.

### 35. MEROPS NUBICUS.

*Merops nubicus*, Gm., Finsch & Hartl. Vög. Ostaf. p. 182; Fischer & Reichenow, J. f. O. 1878, p. 256; Fischer, tom. cit. p. 288; Bocage, Orn. d'Angola, p. 90; Fischer, J. f. O. 1879, pp. 282, 294, 302, 303.

Lamo; Pangani.

The Pangani river appears to be its furthest authentic limit south, as its occurrence in Cape Colony, on the authority of a specimen in the Leiden Museum, is very doubtful; nor do I consider its claims to be a native of Angola any more satisfactory. I am, in consequence, obliged to limit the range of this species in East Africa from 15° N. lat. to Zanzibar, and in West Africa to Senegambia.

### 36. MELITTOPHAGUS PUSILLUS.

*Merops minutus* (P. L. S. Müll.), Finsch & Hartl. Vög. Ostaf. p. 188; Fischer & Reichenow, J. f. O. 1878, p. 256; Fischer, tom. cit. p. 288.

*Merops pusillus*, Sharpe, P. Z. S. 1873, p. 712; Nicholson, P. Z. S. 1878, p. 355.

*Melitophagus cyanostictus*, Cab. J. f. O. 1875, p. 340; id. J. f. O. 1878, p. 235.

Lamo; Melinda; Dar-es-Salaam.

This species ranges throughout Africa south of about 17° N. lat., and is represented in my collection by three races, to be distinguished by the following characters:—(1) East-African race, *M. cyanostictus*, Cab., with a distinct cobalt-blue eyebrow extending forward in a narrow streak round the forehead, the front border of the black collar rather more distinctly margined with blue than in the next two races, represented by five East-African specimens; (2) South-African race, with a distinct blue eyebrow of a paler shade than in the last race and not extending forward to the forehead, represented by nine South-African and two Congo specimens; (3) Gold Coast race, the blue eyebrow barely visible and not extending forward beyond the eye, the blue front border to the black collar generally a trifle narrower than in the other races, represented by seven specimens from the Gold Coast.

I can detect no other characters for these races, and do not consider those mentioned to be of specific value.

### 37. DICROERCUS HIRUNDINACEUS.

*Merops hirundineus* (Licht.), Finsch & Hartl. Vög. Ostaf. p. 193.

*Dicrocercus hirundinaceus*, Nicholson, P. Z. S. 1878, p. 355.

Dar-es-Salaam.

This species ranges in East Africa from the Djur country (Upper Proc. Zool. Soc.—1881, No. XXXVII. 37

White Nile district) to the Zambesi, and on the west coast from Senegal to the Orange river in South Africa.

### 38. UPUPA AFRICANA.

*Upupa africana*, Bechst., Finsch & Hartl. Vög. Ostaf. p. 200.

*Upupa minor*, Cab. J. f. O. 1878, p. 234.

Pangani.

Dr. Cabanis, *l. c.*, records it as having been collected by Dr. Hildebrandt in Uteita, its most northerly habitat in East Africa yet known. It also inhabits the whole of South and West Africa.

### 39. IRRISOR ERYTHRORHYNCHUS.

*Irrisor erythrorhynchus* (Lath.), Finsch & Hartl. Vög. Ostaf. p. 202; Sharpe, P. Z. S. 1873, p. 712; Fischer, J. f. O. 1877, p. 178; Nicholson, P. Z. S. 1878, p. 355; Fischer & Reichenow, J. f. O. 1878, p. 256; Fischer, tom. cit. p. 287; id. J. f. O. 1879, p. 291; Fischer & Reichenow, J. f. O. 1880, p. 141; Gurney, Ibis, 1881, p. 125.

*Irrisor senegalensis*, Cab. J. f. O. 1878, p. 234.

Usambara mountains; Ugogo; Dar-es-Salaam.

It ranges throughout Africa south of about 16° N. lat.

### 40. RHINOPOMASTES CYANOMELAS.

*Irrisor cyanomelas* (Vieill.), Finsch & Hartl. Vög. Ostaf. p. 207; Fischer & Reichenow, J. f. O. 1878, p. 256; Fischer, tom. cit. p. 287; id. J. f. O. 1879, p. 291; Fischer & Reichenow, tom. cit. p. 344.

*Rhinopomastes cyanomelas*, Cab. J. f. O. 1878, p. 235.

Lamo.

This species ranges throughout Africa south of about 15° N. lat.

### 41. CINNYRIS MICRORHYNCHUS.

*Nectarinia jardinei*, Finsch & Hartl. Vög. Ostaf. p. 218, pl. 2. fig. 1; Sharpe, P. Z. S. 1873, p. 713; Fischer & Reichenow, J. f. O. 1878, p. 260; Fischer, tom. cit. p. 280; Fischer, J. f. O. 1880, pp. 188, 191.

*Cinnyris microrhynchus*, Shelley, Monogr. Sun-birds, p. 219, pl. 67 (1876); Nicholson, P. Z. S. 1878, p. 355; Gurney, Ibis, 1881, p. 125.

*Cinnyris jardinei*, Cab. J. f. O. 1878, p. 227; Fischer & Reichenow, J. f. O. 1879, p. 347.

Usambara hills; Dar-es-Salaam.

This species is confined to the Zanzibar coast.

### 42. CINNYRIS GUTTURALIS.

*Nectarinia gutturalis* (Linn.), Finsch & Hartl. Vög. Ostaf. p. 216; Sharpe, P. Z. S. 1873, p. 713; Fischer & Reichenow, J. f. O. 1878, p. 260; Fischer, tom. cit. p. 280; id. J. f. O. 1879, p. 300; id. J. f. O. 1880, pp. 188, 191.

*Cinnyris gutturalis*, Shelley, Monogr. Sun-birds, p. 261, pl. 81;

Nicholson, P. Z. S. 1878, p. 355; Cab. J. f. O. 1878, p. 227; Fischer & Reichenow, J. f. O. 1879, p. 348; Gurney, Ibis, 1881, p. 125.

Pangani; Usambara hills; Dar-es-Salaam.

This species ranges from Mombas to Natal, and thence to Damaraland and Angola.

#### 43. CINNYRIS KIRKI.

*Cinnyris kirki*, Shelley, Monogr. Sun-birds, p. 273, pl. 85 (1876); Gurney, Ibis, 1881, p. 125.

*Cinnyris kalckreuthi*, Cab. J. f. O. 1878, p. 227; Fischer & Reichenow, J. f. O. 1879, p. 348.

*Nectarinia kalckreuthi*, Fischer & Reichenow, J. f. O. 1878, p. 260; Fischer, tom. cit. p. 280; id. J. f. O. 1879, p. 300.

Usambara hills.

This species is confined to East Africa, where it ranges from Mombas to the Zambesi.

#### 44. ANTHREPTES ZAMBESIANA.

*Nectarinia collaris*, pt., Finsch & Hartl. Vög. Ostafri. p. 223; Sharpe, P. Z. S. 1873, p. 713; Fischer & Reichenow, J. f. O. 1878, p. 260; Fischer, J. f. O. 1879, p. 300, 1880, pp. 188, 191.

*Anthodiæta zambesiana*, Shelley, Monogr. Sun-birds, p. 343, pl. 111; Nicholson, P. Z. S. 1878, p. 356; Gurney, Ibis, 1881, p. 125.

*Anthodiæta collaris*, Cab. J. f. O. 1878, p. 227.

Pangani; Dar-es-Salaam.

Like the last species, it ranges from Mombas to the Zambesi.

#### 45. CISTICOLA ISODACTYLA.

*Drymoica isodactyla*, Finsch & Hartl. Vög. Ostafri. p. 236; Sharpe, P. Z. S. 1873, p. 712.

*Cisticola isodactyla*, Peters, Nicholson, P. Z. S. 1878, p. 356.

Pangani; Usambara hills; Dar-es-Salaam.

This is a common bird on the Zanzibar coast, and ranges from Mombas to Delagoa Bay in South-eastern Africa.

#### 46. CISTICOLA HÆMATOCEPHALA.

*Drymoica stulta*, Finsch & Hartl. Vög. Ostafri. p. 235.

*Cisticola hæmatocephala*, Cab. J. f. O. 1878, p. 222; Fischer & Reichenow, tom. cit. p. 267; Fischer, tom. cit. p. 280; id. J. f. O. 1879, pp. 279, 303; Fischer & Reichenow, tom. cit. p. 354.

Lamo.

This species has been collected at Mombas by the Baron von der Decken and by Dr. Fischer; and the latter gentleman gives a description of the nest and eggs. Dr. Hildebrandt procured it on the coast and at Kitui in Ukamba. Beyond this limited portion of Eastern Africa it has, as yet, only been recorded from the Loango coast, in Western Africa, by Dr. Cabanis.

47. *CISTICOLA RHODOPTERA.*

*Cisticola rhodoptera*, Shelley, Ibis, 1880, p. 333.

Usambara hills.

The type specimen is the only one I have yet seen of this species.

48. *MELOCICHLA MENTALIS.*

*Drymoica mentalis*, Fraser, P. Z. S. 1843, p. 16.

*Melocichla mentalis*, Cab. J. f. O. 1878, p. 221.

Usambara mountains.

Dr. Hildebrandt collected this bird at Kitui in Ukamba. The only other locality I am aware of for this species is the Gold Coast. Two specimens collected by Dr. Kirk agree well with skins in my own collection from Fantee.

49. *SAXICOLA CENANTHE.*

*Saxicola cenanthe*, Linn., Cab. J. f. O. 1878, p. 220; Gurney, Ibis, 1881, p. 125.

Usambara hills ; Usambara mountains.

The Common Wheatear was first collected in East Africa by Dr. Hildebrandt, near the Adi river in Ukamba.

This species ranges throughout North Africa, and extends southward on the east coast to the Pangani river, and on the west coast to the Gambia.

50. *SAXICOLA SHELLEYI.*

*Saxicola shelleyi*, Sharpe, new ed. Layard's B. S. Afr. p. 246.

Ugogo.

Dr. Kirk has sent me three specimens (*a*, *b*, *c*), which differ considerably in their plumage, although all collected at the same time of the year.

As this species is but little known, I shall give a short description of the plumage of these specimens, as well as of two others (*d*, *e*) from the Zambesi, collected by Dr. Bradshaw and also in my own collection.

In all the general plumage is black.

Spec. *a* has the forehead and crown white slightly shaded with brown, and with indistinct brown stripes down the centres of the feathers ; the wing-coverts, with the exception of a few of the outer ones, are white ; the primary- and greater wing-coverts broadly tipped with black ; the basal half of the outer scapulars edged with white.

Spec. *b*. Forehead, crown, and chin slightly mottled with white feathers ; wings as in spec. *a*, only with the black tips to the primary- and greater wing-coverts slightly broader.

Spec. *c*. Entire chin and throat white, the feathers narrowly tipped with black, forming irregular bars ; the centre of the chest mottled with white ; wings as in spec. *a*, excepting that the black ends to the greater wing-coverts gradually disappear towards the innermost ones, which are entirely white.

Spec. *d*. Similar in plumage to spec. *c*, but with the white feathers

not descending so far down on the centre of the chest ; no black ends to any of the wing-coverts ; primary-coverts more narrowly tipped with black.

Spec. e. Similar to spec. d, with the white feathers of the throat ending at the base of the crop ; only the basal half of the primary-coverts white, the greater coverts broadly tipped with black.

#### 51. MOTACILLA VIDUA.

*Motacilla vidua*, Sund., Finsch & Hartl. Vög. Ostafri. p. 263 ; Fischer J. f. O. 1879, p. 294 ; Fischer & Reichenow, tom. cit. p. 355.

Ugogo.

This species was first collected in the Zanzibar province by Dr. Fischer, at Muniuni. It ranges from the First Cataract of the Nile throughout East and South Africa, and thence on the west coast as far north as Lagos.

#### 52. MOTACILLA FLAVA.

*Motacilla flava*, Linn., Finsch & Hartl. Vög. Ostafri. p. 268 ; Fischer & Reichenow J. f. O. 1878, p. 268 ; Fischer, J. f. O. 1879, pp. 294, 303.

Pangani.

This species ranges over the whole of Africa.

#### 53. ANTHUS RAALTENI.

*Anthus raalteni*, Temm., Finsch & Hartl. Vög. Ostafri. p. 274 ; Fischer, J. f. O. 1877, p. 207 ; Nicholson, P. Z. S. 1878, p. 356 ; Cab. J. f. O. 1878, p. 220 ; Fischer & Reichenow, tom. cit. p. 268 ; Fischer, tom. cit. p. 279 ; id. J. f. O. 1879, pp. 294, 297, 299, 303 ; Fischer & Reichenow, tom. cit. p. 355.

Pangani.

#### 54. ANTHUS PYRRHONOTUS, Vieill.

Melinda.

New to East Africa.

This species ranges throughout South Africa, and extends northward on the east coast to Melinda.

#### 55. MACRONYX CROCEUS.

*Macronyx croceus* (Vieill.), Finsch & Hartl. Vög. Ostafri. p. 276 ; Cab. J. f. O. 1878, p. 220 ; Fischer & Reichenow, tom. cit. p. 267 ; Fischer, tom. cit. p. 279 ; id. J. f. O. 1879, pp. 294, 303 ; Fischer & Reichenow, tom. cit. p. 355 ; Gurney, Ibis, 1881, p. 125.

*Macronyx striolatus*, Nicholson, P. Z. S. 1878, p. 356.

Usambara hills ; Dar-es-Salaam.

On the east coast it ranges from the White-Nile district to Natal, and on the west coast from Senegal to Angola. The exact distribution in South Africa appears to me to be as yet a little uncertain ; for, although common in the eastern districts in suitable localities,

I am not aware of its having been collected either in Cape Colony or in Damaraland.

I do not consider *M. striolatus*, Heugl., and *M. croceus* (Vieill.) to be distinct.

#### 56. MACRONYX TENELLUS.

*Macronyx tenellus*, Cab. J. f. O. 1878, pp. 205, 220, pl. 2. fig. 1 ; Fischer, J. f. O. 1879, p. 299 ; Fischer & Reichenow, tom. cit. p. 355.

Lama.

This species appears to have a very limited range, having only as yet been recorded from the northern portion of the Zanzibar province.

#### 57. TURDUS LIBONYANUS.

*Turdus libonyanus*, Smith, Finsch & Hartl. Vög. Ostafri. p. 280 ; Fischer & Reichenow, J. f. O. 1880, p. 144.

Ugogo.

Dr. Fischer procured this species at Mozambique in May. It ranges southward from Ugogo to Kuruman and thence to Damaraland and Benguela, but is a rare and local bird, apparently not inhabiting Cape Colony nor yet recorded from any portion of West Africa.

#### 58. TURDUS TEPHRONOTUS.

*Turdus tephronotus*, Cab. J. f. O. 1878, pp. 205, 218, pl. 3. fig. 2 ; Fischer & Reichenow, tom. cit. p. 268 ; Fischer, tom. cit. p. 279 ; id. J. f. O. 1879, p. 279.

Lamo.

This species was first described by Cabanis, *l. c.*, from specimens collected by Dr. Hildebrandt during his journey into Uteita and Ukambani, at the Tiva river and at Udi. Dr. Fischer procured it at Lamo and at Kipini ; and as yet these are the only localities where it is known to occur.

#### 59. COSSYPHA NATALENSIS.

*Cossypha natalensis* (Smith), Finsch & Hartl. Vög. Ostafri. p. 282. *Bessornis natalensis*, Fischer, J. f. O. 1879, pp. 278, 287 ; Fischer & Reichenow, tom. cit. p. 356.

Lamo ; Melinda.

It ranges from Lamo to Natal, and crosses the northern portion of South Africa to Benguela and Angola.

#### 60. COSSYPHA HEUGLINI.

*Cossypha heuglini*, Hartl., Finsch & Hartl. Vög. Ostafri. p. 283.

*Bessornis heuglini*, Cab. J. f. O. 1878, p. 219 ; Fischer & Reichenow, tom. cit. p. 268 ; Fischer, J. f. O. 1879, pp. 278, 287, 303 ; Fischer & Reichenow, tom. cit. p. 356.

Lamo ; Ugogo.

The type was collected at Wau, in the White-Nile district,

whence it ranges southward, on the east coast, to Ugogo, and has been recorded from the west coast from the Congo and Benguela.

#### 61. MONTICOLA SAXATILIS.

*Monticola saxatilis* (Linn.), Cab. J. f. O. 1878, p. 219; Gurney, Ibis, 1881, p. 125.

*Petrocincla saxatilis*, Fischer & Reichenow, J. f. O. 1879, p. 355; 1880, p. 144.

Pangani; Usambara hills; Usambara mountains; Ugogo.

Although apparently a common bird in the Zanzibar province, it had not been recorded from East Africa previous to its being collected by Dr. Hildebrandt at Duruma in Wanika and in Ukamba. It ranges throughout North Africa, extending southward in East Africa to Bagamoyo, opposite Zanzibar Island, where it has been collected by Dr. Fischer, and inland to Ugogo.

#### 62. CRATEROPUS KIRKI.

*Crateropus jardinei*, Sclat. P. Z. S. 1864, p. 108; Finsch & Hartl. Vög. Ostafri. p. 289, pt.

*Crateropus kirki*, Sharpe, Nicholson, P. Z. S. 1878, p. 356; Cab. J. f. O. 1878, p. 226; Fischer & Reichenow, tom. cit. p. 260; Fischer, tom. cit. p. 278.

Usambara hills; Usambara mountains.

This species ranges from Bogue in Uzinga (where it has been recorded on the authority of Captain Speke) southward to the Zambesi.

#### 63. ARGYA RUBIGINOSA.

*Crateropus rubiginosus*, Rüpp., Fischer & Reichenow, J. f. O. 1878, p. 260; Fischer, J. f. O. 1879, p. 289.

Pangani.

Dr. Fischer procured this species at Mombas. There is a specimen from Zanzibar in the British Museum. From Zanzibar it ranges northward to Shoa, in North-eastern Africa, about 10° N. lat.

#### 64. PHYLLOSTREPHUS STREPITANS.

*Criniger strepitans*, Reichenow, Ornith. Centralbl. 1879, p. 139; Fischer, J. f. O. 1879, pp. 278, 287; Reichenow & Schalow, tom. cit. p. 318.

*Phyllostrephus sharpei*, Shelley Ibis, 1880, p. 334.

*Phyllostrephus strepitans*, Sharpe, Cat. B. vi. p. 117.

Dar-es-Salaam.

This species ranges from Melinda, where it has been collected by Dr. Fischer, to Dar-es-Salaam.

Mr. Sharpe, who has recently examined these birds in the course of preparing the British-Museum Catalogue, informs me that *Criniger strepitans* is identical with my *Phyllostrephus sharpei*.

#### 65. ORIOLUS GALBULA.

*Oriolus galbula*, Linn., Sharpe, P. Z. S. 1873, p. 714; id. Cat.

B. iii. p. 191; Cab. J. f. O. 1878, p. 234; Gurney, Ibis, 1881, p. 126.

Lamo; Usambara mountains; Ugogo.

It ranges throughout Africa, but is everywhere migratory, only occurring in Tropical and Southern Africa during the winter months.

#### 66. ORIOLUS NOTATUS.

*Oriolus notatus*, Peters, Finsch & Hartl. Vög. Ostaf. p. 291; Sharpe, Cat. B. iii. p. 196; Cab. J. f. O. 1878, p. 234; Fischer & Reichenow, tom. cit. p. 261; Fischer, tom. cit. p. 287; Fischer & Reichenow, J. f. O. 1879, p. 349; Gurney, Ibis, 1881, p. 126.

Lamo; Melinda; Usambara mountains; Ugogo.

In nine East- and South-African specimens before me the black on the tail differs in extent in each; and it appears to me that there are no constant characters by which *O. auratus*, Vieill., and *O. notatus*, Peters, can be specifically separated.

#### 67. ORIOLUS BRACHYRRHYNCHUS.

*Oriolus larvatus*, Sharpe, P. Z. S. 1873, p. 714; Nicholson, P. Z. S. 1878, p. 356.

*Oriolus brachyrrhynchus*, Swains., Sharpe, Cat. B. iii. p. 218.

*Oriolus rolleti*, Fischer & Reichenow, J. f. O. 1878, p. 262; Fischer, J. f. O. 1879, pp. 282, 300; Fischer & Reichenow, tom. cit. p. 349.

Lamo; Melinda; Usambara mountains; Dar-es-Salaam.

It ranges in Eastern Africa from Lamo to Dar-es-Salaam, and on the west coast from Sierra Leone to the Gaboon. I have one of Dr. Fischer's specimens from Mombas, labelled *O. rolleti*, which belongs to this species, not to the larger South-African form *O. larvatus*. The *O. larvatus* of both Sharpe and Nicholson (*ll. cc.*) undoubtedly belongs to this species.

#### 68. ANDROPADUS FLAVESCENS.

*Andropadus flavescens*, Hartl., Finsch & Hartl. Vög. Ostaf. p. 295, pl. 3. fig. 1; Sharpe, P. Z. S. 1873, p. 712; Fischer, J. f. O. 1877, pp. 180, 425; Fischer & Reichenow, J. f. O. 1878, p. 261; Fischer, tom. cit. p. 278; id. J. f. O. 1879, pp. 287, 303; Fischer & Reichenow, tom. cit. p. 348; Fischer, J. f. O. 1880, pp. 188, 192.

Lamo; Melinda; Pangani.

It ranges from Lamo to Zanzibar.

#### 69. PYCNONOTUS LAYARDI.

*Pycnonotus nigricans*, Finsch & Hartl. Vög. Ostaf. p. 297, part.; Sharpe, P. Z. S. 1873, p. 712; Fischer, J. f. O. 1877, p. 175; Cab. J. f. O. 1878, p. 227; Fischer & Reichenow, tom. cit. p. 260; Fischer, tom. cit. p. 278; id. J. f. O. 1879, pp. 287, 303; 1880, pp. 188, 192.

*Pycnonotus layardi*, Gurney, Ibis, 1879, p. 390.

Pangani; Usambara hills; Usambara mountains; Dar-es-Salaam.

None of Dr. Kirk's specimens has the red-wattled eyelid of *P. nigricans*; but all agree perfectly with the common Natal form, for which Mr. Gurney, *l. c.*, has proposed the name of *P. layardi*.

This species ranges from Mombas southward throughout Eastern Africa to Natal and Kaffraria.

#### 70. MUSCICAPA GRISOLA.

*Muscicapa grisola*, Linn., Finsch & Hartl. Vög. Ostafri. p. 300; Sharpe, P. Z. S. 1873, p. 713; id. Cat. B. iv. 151; Fischer, J. f. O. 1877, p. 180; id. 1879, p. 302.

*Butalis grisola*, Cab. J. f. O. 1878, p. 223; Fischer & Reichenow, tom. cit. p. 258.

Pangani; Usambara hills; Usambara mountains.

It ranges throughout Africa, but is migratory in its habits.

#### 71. TERPSIPHONE PERSPICILLATA.

*Terpsiphone cristata*, Finsch & Hartl. Vög. Ostafri. p. 304; Fischer, J. f. O. 1877, pp. 172, 175, 179, 207.

*Terpsiphone perspicillata*, Swains., Sharpe, Cat. B. iv. p. 357.

Usambara mountains.

This species ranges throughout South Africa to Angola on the west coast, and to the Usambara country in East Africa.

#### 72. TERPSIPHONE CRISTATA.

*Terpsiphone melanogastra*, Finsch & Hartl. Vög. Ostafri. p. 309; Fischer, J. f. O. 1879, pp. 278, 288, 300, 303.

*Terpsiphone ferreli*, Cab. J. f. O. 1878, p. 223; Fischer & Reichenow, tom. cit. p. 258; Fischer, tom. cit. p. 273; id. J. f. O. 1879, p. 277; Fischer & Reichenow, tom. cit. p. 345.

*Terpsiphone cristata* (Gm.), Sharpe, Cat. B. iv. p. 354.

Lamo; Melinda.

This species ranges in East Africa from Kordofan to Zanzibar, in which latter locality it has been collected by Dr. Fischer, and on the west coast from Senegal to the Congo.

#### 73. BATIS SENEGALENSIS.

*Platystira senegalensis* (Linn.), Finsch & Hartl. Vög. Ostafri. p. 317; Fischer & Reichenow, J. f. O. 1878, p. 257; Fischer, tom. cit. p. 274; id. J. f. O. 1879, pp. 288, 303.

*Batis senegalensis*, Sharpe, Ibis, 1873, p. 173; id. P. Z. S. 1873, p. 713; id. Cat. B. iv. p. 134.

Usambara hills; Usambara mountains; Dar-es-Salaam.

This species ranges from 16° N. lat., on the east coast, to Dar-es-Salaam, and on the west coast from Senegal to the Congo.

The *Platystira senegalensis*, Monteiro (P. Z. S. 1865, p. 95), from Benguela, refers to *Batis pririt* (Vieill.).

#### 74. PLATYSTIRA PELTATA.

*Platystira peltata*, Sundev., Sharpe, Ibis, 1873, p. 160, pl. 4. figs. 2, 3; Cab. J. f. O. 1878, p. 224; Fischer & Reichenow, tom.

cit. p. 257; Fischer, tom. cit. p. 274; Sharpe, Cat. B. iv. p. 147; Fischer, J. f. O. 1879, p. 288.

Lamo.

It ranges from Lamo to the Zambesi and the eastern portion of South Africa.

#### 75. BRADYORNIS PALLIDUS.

*Bradyornis pallidus* (Müll.), Finsch & Hartl. Vög. Ostafri. p. 322; Sharpe, Cat. B. iii. p. 310; Nicholson, P. Z. S. 1878, p. 357; Cab. J. f. O. 1878, p. 223; Fischer & Reichenow, tom. cit. p. 257; Fischer, tom. cit. p. 273; id. J. f. O. 1879, pp. 277, 299, 303; Fischer & Reichenow, tom. cit. p. 345.

*Bradyornis modestus*, Shelley, Ibis, 1873, p. 140; Sharpe, Cat. B. iii. p. 310.

*Bradyornis subalaris*, Sharpe, P. Z. S. 1873, p. 713, pl. 58. fig. 1.

Lamo; Dar-es-Salaam.

This species ranges from Kordofan to Dar-es-Salaam, and crosses the continent to the Gold Coast, where I collected a specimen which I incorrectly described as new under the title of *B. modestus*.

#### 76. PARUS ALBIVENTRIS.

*Parus albiventris*, Shelley, Ibis, 1881, p. 116.

Ugogo.

Only known by the two type specimens, probably male and female.

#### 77. BUCHANGA ASSIMILIS.

*Dicrurus divaricatus*, Finsch & Hartl. Vög. Ostafri. p. 323; Sharpe, P. Z. S. 1873, p. 714; Fischer, J. f. O. 1877, p. 172, 1880, p. 188.

*Buchanga assimilis* (Bechst.), Sharpe, Cat. B. iii. p. 247; Nicholson, P. Z. S. 1878, p. 357.

*Dicrurus fugax*, Cab. J. f. O. 1878, p. 227; Fischer & Reichenow, tom. cit. p. 258; Fischer, J. f. O. 1879, pp. 300, 303.

Lamo; Melinda; Pangani; Usambara hills; Dar-es-Salaam.

It inhabits the whole of Africa south of about 16° N. lat.

#### 78. DICRURUS ATRIPENNIS.

*Dicrurus atripennis*, Swains., Sharpe, Cat. B. iii. p. 232.

Usambara mountains.

This is the first mention of the species from East Africa. It ranges from the Usambara country to Fantee, and thence to the river Gambia.

#### 79. CAMPEPHAGA NIGRA.

*Campephaga nigra* (Vieill.), Cab. J. f. O. 1878, p. 227; Fischer & Reichenow, tom. cit. p. 258; Fischer, J. f. O. 1879, p. 278; Fischer & Reichenow, tom. cit. p. 345.

Melinda; Ugogo.

This species ranges throughout the whole of South Africa, and extends northward on the east coast to about 3° S. lat., having been

collected by Dr. Hildebrandt at Ndi, and by Dr. Fischer at Mombas and Muniuni.

#### 80. LANIUS CAUDATUS.

*Lanius caudatus*, Cab., Finsch & Hartl. Vög. Ostafri. p. 330; Cab. J. f. O. 1878, p. 226; Fischer & Reichenow, tom. cit. p. 259; Fischer, tom. cit. p. 276; id. J. f. O. 1879, pp. 294, 302, 303; Fischer & Reichenow, tom. cit. p. 347; Gurney, Ibis, 1881, p. 126.

Lamo; Melinda; Dar-es-Salaam.

This species is apparently confined to East Africa, where it ranges from Lamo to Dar-es-Salaam.

#### 81. LANIUS COLLURIO.

*Lanius collurio*, Linn., Finsch & Hartl. Vög. Ostafri. p. 331; Fischer, J. f. O. 1877, pp. 172, 180; Fischer & Reichenow, J. f. O. 1878, p. 259.

Usambara hills; Usambara mountains.

The Red-backed Shrike ranges throughout the whole of North, East, and South Africa, but has not yet been recorded from the west coast.

#### 82. TELEPHONUS ERYTHROPTERUS.

*Telephonus erythropterus* (Shaw), Finsch & Hartl. Vög. Ostafri. p. 336; Sharpe, P. Z. S. 1873, p. 714; Nicholson, P. Z. S. 1878, p. 357; Fischer & Reichenow, J. f. O. 1878, p. 259; Fischer, tom. cit. p. 276; id. J. f. O. 1879, pp. 287, 303; Fischer & Reichenow, tom. cit. p. 347.

*Pomatorhynchus erythropterus*, Cab. J. f. O. 1878, p. 224.

Lamo; Usambara hills; Usambara mountains.

This species inhabits the whole of Africa.

#### 83. TELEPHONUS TRIVIRGATUS.

*Telephonus trivirgatus*, Smith, Finsch & Hartl. Vög. Ostafri. p. 338.

Usambara hills.

This species ranges from Abyssinia throughout East and South Africa, and on the west from Angola to the Loango coast.

#### 84. TELEPHONUS ANCHIETÆ.

*Telephonus anchietæ*, Bocage, Jorn. Acad. Sc. Lisboa, no. viii. 1870, p. 344; id. Orn. d'Angola, pl. 4.

*Telephonus minutus*, Bocage, Orn. d'Angola, p. 255 (1877).

Lamo; Usambara hills.

The specimens sent me by Dr. Kirk are male and female, apparently fully adult. *Telephonus anchietæ* is, in my opinion, a good species, readily to be distinguished from *T. minutus*, Hartl. (P. Z. S. 1858, p. 292), by the absence of black on the scapulars. In the male of *T. anchietæ* there is no trace of black on the scapulars; and in the female it is confined to the centres of a few of the larger feathers, and is only visible on these feathers being raised; while in

two males and a female from the Gold Coast, and a male from the Congo, of *T. minutus*, the black on the scapulars is strongly marked as in the type specimen. This species ranges from Lamo to the Quanza, in Angola.

#### 85. DRYOSCOPUS SUBLACTEUS.

*Laniarius sublacteus* (Cassin), Finsch & Hartl. Vög. Ostafri. p. 347.

*Dryoscopus sublacteus*, Fischer, J. f. O. 1877, p. 207; Fischer & Reichenow, J. f. O. 1878, p. 259; Fischer, tom. cit. p. 274; id. J. f. O. 1879, pp. 277, 303; Fischer & Reichenow, tom. cit. p. 346; Fischer, J. f. O. 1880, p. 189.

*Malaconotus sublacteus*, Cab. J. f. O. 1878, p. 224.

Lamo; Melinda; Pangani.

I only know of this species from the Zanzibar coast and the Gaboon. Cassin's type was procured in the latter locality.

#### 86. DRYOSCOPUS CUBLA.

*Laniarius cubla* (Shaw), Finsch & Hartl. Vög. Ostafri. p. 345.

*Dryoscopus cubla*, Sharpe, P. Z. S. 1873, p. 714; Cab. J. f. O. 1878, p. 224.

Lamo; Melinda; Pangani; Usambara hills.

Two adult males, compared with Natal specimens, agree perfectly; while two adult females have rather less white on the margins of the wing-feathers than any of my South-African specimens.

This species ranges throughout South Africa, and extends northward, on the east coast, to Lamo.

#### 87. DRYOSCOPUS AFFINIS.

*Laniarius affinis*, G. R. Gray, Finsch & Hartl. Vög. Ostafri. p. 348.

*Laniarius salimæ*, Finsch & Hartl. tom. cit. p. 349, pl. 5. fig. 3.

*Laniarius orientalis*, Finsch & Hartl. tom. cit. p. 351, pl. 5. fig. 2.

*Dryoscopus salimæ*, Sharpe, P. Z. S. 1873, p. 714; Cab. J. f. O. 1878, p. 224; Fischer & Reichenow, tom. cit. p. 258; Fischer, tom. cit. p. 274; id. J. f. O. 1879, p. 303.

*Dryoscopus affinis*, Fischer, J. f. O. 1877, p. 207; Nicholson, P. Z. S. 1878, p. 357; Fischer & Reichenow, J. f. O. 1878, p. 258; Fischer, tom. cit. p. 274; Gurney, Ibis, 1881, p. 127.

Lamo; Melinda; Pangani; Usambara mountains; Dar-es-Salaam.

In seven males I find a perfect gradation between typical *D. affinis* and typical *D. salimæ*; and there can be no doubt that *D. orientalis* is nothing but the female. This species ranges from Lamo to Dar-es-Salaam, and crosses the continent to the Gaboon.

#### 88. LANIARIUS SULPHUREIPECTUS.

*Laniarius sulfureipectus* (Less.), Finsch & Hartl. Vög. Ostafri. p. 356; Fischer & Reichenow, J. f. O. 1879, p. 346.

Melinda.

This species ranges throughout Africa south of about 15° N. lat.

## 89. NICATOR GULARIS.

*Nicator gularis*, Finsch & Hartl. Vög. Ostafri. p. 360 ; Cab. J. f. O. 1878, p. 225 ; Fischer & Reichenow, tom. cit. p. 259 ; Fischer, tom. cit. p. 277.

Lamo.

This species ranges from Lamo to the Zambesi.

## 90. MALACONOTUS ICTERUS (Cuv.).

*Meristes olivaceus*, Finsch & Hartl. Vög. Ostafri. p. 361 ; Fischer & Reichenow, J. f. O. 1878, p. 259 ; Fischer, tom. cit. p. 275 ; id. J. f. O. 1879, pp. 287, 300 ; Fischer & Reichenow, tom. cit. p. 346 ; Gurney, Ibis, 1881, p. 126.

Lamo ; Usambara mountains ; Ugogo ; Dar-es-Salaam.

This species ranges throughout Africa south of about 16° N. lat.

*Lanius olivaceus*, Shaw, Gen. Zool. vii. p. 330, refers to a distinct species well figured by Levaillant, Ois. d'Afr. ii. p. 75 ; so that the title *olivaceus*, Vieill., cannot be here employed.

## 91. PRIONOPS TALACOMA.

*Prionops talacoma*, Smith, Finsch & Hartl. Vög. Ostafri. p. 365 ; Sharpe, Cat. B. iii. p. 321.

Ugogo ; Dar-es-Salaam.

It ranges from Ugogo southward to the Transvaal, and from thence through the northern portion of South Africa to Damaraland and Angola.

## 92. SIGMODUS TRICOLOR.

*Prionops graculinus*, Finsch & Hartl. tom. cit. p. 368 ; Sharpe, P. Z. S. 1873, p. 714 ; Cab. J. f. O. 1878, p. 224 ; Fischer & Reichenow, tom. cit. p. 259 ; Fischer, tom. cit. p. 275 ; id. J. f. O. 1879, p. 287 ; Fischer & Reichenow, tom. cit. p. 347.

*Sigmodus tricolor* (Gray), Sharpe, Cat. B. iii. p. 325.

*Sigmodus graculinus*, Sharpe, loc. cit. ; Nicholson, P. Z. S. 1878, p. 357.

Pangani ; Usambara hills ; Usambara mountains ; Dar-es-Salaam.

In my opinion *S. tricolor* and *S. graculinus* are not specifically distinct. They both inhabit the same country north from the Zambesi ; the former is known to range to Pangani, and the latter to Mombas. The white bar on the wing is a very variable character ; and although present in nine specimens from the above localities, it is reduced in one from Pangani to small, almost obsolete spots, only visible on the fourth and seventh primaries. Four specimens, collected by Dr. Kirk at Dar-es-Salaam, have the white bar on the wing clearly defined, while another specimen from the same locality, presented to me by the late Mr. E. C. Buxton, has no white on the wing, and is a typical example of *S. graculinus*.

I can detect no difference in the colouring of the remainder of the plumage, nor in any of the measurements.

With no white on the quills, *S. graculinus*, Cab.

Dar-es-Salaam. Length 8·8 inches, culmen 0·8, wing 4·6, tail 3·8, tarsus 0·9.

With white on the quills, *S. tricolor*, Gray.

	Length. in.	Culmen. in.	Wing. in.	Tail. in.	Tarsus. in.
Zambesi . . . . .	8·4	0·8	4·85	3·75	0·9
Dar-es-Salaam . . . . .	8·0	0·85	4·7	3·7	0·85
Usambara hills . . . . .	8·5	0·8	4·8	3·85	0·95
Usambara mountains . . . . .	8·35	0·85	4·7	3·75	0·95
Usambara mountains . . . . .	8·3	0·9	4·85	3·8	0·95

### 93. SIGMODUS SCOPIFRONS. (Plate LI. fig. 1.)

*Sigmodus scopifrons*, Peters, J. f. O. 1854, p. 422; Sharpe, Cat. B. iii. p. 324.

*Prionops scopifrons*, Finsch & Hartl. Vög. Ostafri. p. 368.

Lamo ; Usambara hills ; Usambara mountains.

These are new localities for this rare species, which was formerly only known from the Mosambique.

### 94. EUROCEPHALUS ANGUITIMENS.

*Eurocephalus anguitimens*, Smith, Sharpe, Cat. B. iii. p. 279; Fischer & Reichenow, J. f. O. 1879, p. 347.

Ugogo.

This species ranges throughout South Africa, and extends northward in East Africa to Kibaradja, where it has been collected by Dr. Fischer.

### 95. PÆOPTERUS LUGUBRIS.

*Pæopterus lugubris*, Bp., Sharpe, P. Z. S. 1878, p. 803, pl. 49. Usambara mountains.

New to East Africa. This species was hitherto only known as a native of West Africa, where it ranges from the Gold Coast to the Gaboon.

### 96. CORVUS SCAPULATUS.

*Corvus scapulatus*, Daud., Finsch & Hartl. Vög. Ostafri. p. 374; Fischer, J. f. O. 1877, pp. 176, 425; Cab. J. f. O. 1878, p. 234; Fischer & Reichenow, tom. cit. p. 261; Fischer, tom. cit. p. 287; id. J. f. O. 1879, pp. 292, 303.

Dar-es-Salaam.

This Crow ranges throughout the Ethiopian Region south of about 20° N. lat.

### 97. PHOLIDAUGES VERREAUXI.

*Pholidauges leucogaster*, Finsch & Hartl. Vög. Ostafri. p. 376 (part).

*Pholidauges verreauxi*, Bocage, Sharpe, P. Z. S. 1873, p. 714;

Nicholson, P. Z. S. 1878, p. 357; Cab. J. f. O. 1878, p. 233; Fischer & Reichenow, tom. cit. p. 261; Gurney, Ibis, 1881, p. 127.

Lamo; Melinda; Usambara hills; Usambara mountains; Dar-es-Salaam.

This and the closely allied *P. leucogaster* together range over the whole of Africa south of about 16° N. lat.,—*P. verreauxi* being confined to the south of the equator, and *P. leucogaster* to the north of the line.

#### 98. NOTAUGES SUPERBUS.

*Notauges superbus* (Rüpp.), Finsch & Hartl. Vög. Ostafri. p. 378; Cab. J. f. O. 1878, p. 233.

Ugogo; Dar-es-Salaam.

This species is confined to East Africa, where it ranges from Dar-es-Salaam northward to about 10° N. lat.

#### 99. LAMPROCOLIUS SYCOBIUS.

*Lamprocolius sycobius*, Peters, Finsch & Hartl. Vög. Ostafri. p. 380; Cab. J. f. O. 1878, p. 233; Fischer & Reichenow, tom. cit. p. 261; Fischer, tom. cit. p. 286; Gurney, Ibis, 1881, p. 127.

Ugogo.

This species ranges from the Zambesi northward to about 2° S. lat. The actual northern limit as yet known for this bird is the Ukambani country, where it has been collected by Dr. Hildebrandt.

#### 100. LAMPROCOLIUS MELANOGASTER.

*Lamprocolius melanogaster* (Swains.), Finsch & Hartl. Vög. Ostafri. p. 381; Fischer & Reichenow, J. f. O. 1878, p. 261; Fischer, tom. cit. p. 286; Gurney, Ibis, 1881, p. 127.

*Lamprotornis melanogaster*, Fischer, J. f. O. 1879, p. 292.

Lamo; Melinda; Pangani.

This species ranges from Lamo southward to Durban in Natal, and to the Knysna in Cape Colony. It is, I believe, nowhere to be met with in West Africa; for I consider the locality Senegal, given by Swainson for this species, to be an error.

#### 101. COSMOPSARUS UNICOLOR.

*Cosmopsarus unicolor*, Shelley, Ibis, 1881, p. 116.

Ugogo.

This is another of the interesting novelties procured by Dr. Kirk, and is the second known species of the genus *Cosmopsarus*, which appears to be confined to East Africa.

#### 102. AMYDRUS RUEPPELLI.

*Amydrus rueppelli*, Verr., Finsch & Hartl. Vög. Ostafri. p. 382.

Ugogo.

This species ranges from Kordofan to Ugogo, but has not yet been recorded from the coast of the Zanzibar province.

## 103. AMYDRUS WALLERI.

*Amydrus walleri*, Shelley, Ibis, 1880, p. 335, pl. 8.

Usambara mountains.

The only specimens known are the types—a male and two females. This species is about one third smaller than the South-African *A. morio*; the bill is proportionally shorter and stouter; and the head, neck, and wings are greener. The sexes differ in a very similar manner to those of *A. morio*.

## 104. HYPHANTORNIS NIGRIFRONS.

*Hyphantornis velatus*, Cab., pt., Finsch & Hartl. Vög. Ostafri. p. 390, note.

? *Hyphantornis cabanisi*, Fischer & Reichenow, J. f. O. 1878, p. 263; Fischer, tom. cit. p. 285.

Lamo; Usambara mountains.

## 105. HYPHANTORNIS NIGRICEPS.

*Hyphantornis nigriceps*, Layard, Finsch & Hartl. Vög. Ostafri. p. 392; Sharpe, P. Z. S. 1873, p. 715; Nicholson, P. Z. S. 1878, p. 358; Cab. J. f. O. 1878, p. 231; Fischer & Reichenow, tom. cit. p. 262; Fischer, J. f. O. 1879, pp. 281, 302; Fischer & Reichenow, J. f. O. 1880, p. 143; Gurney, Ibis, 1881, p. 127.

Lamo; Melinda; Usambara hills; Usambara mountains; Dar-es-Salaam.

This species ranges from Lamo to Mosambique in East Africa, and, according to Mr. Layard, has been collected at Kuruman in South Africa.

## 106. HYPHANTORNIS AUREOFLAVUS.

*Hyphantornis aureoflavus* (Smith), Finsch & Hartl. Vög. Ostafri. p. 400; Fischer, J. f. O. 1877, p. 178; Cab. J. f. O. 1878, p. 231; Fischer & Reichenow, tom. cit. p. 262; Fischer, tom. cit. p. 284; id. J. f. O. 1879, pp. 286, 302; Fischer & Reichenow, J. f. O. 1880, p. 142; Fischer, tom. cit. p. 188.

Pangani.

I am unable to define satisfactorily the range of this species. Its southern limit appears to be Mosambique. On the Zanzibar coast it is plentiful. In the Leiden Museum there is a specimen labelled "Nubia," on the authority of Rüppell; and Sir A. Smith's type came from Sierra Leone (Ill. Zool. S. Afr., note to pl. 30).

## 107. SYCOBROTUS KERSTENI.

*Sycobrotus kersteni*, Finsch & Hartl. Vög. Ostafri. p. 404, pl. 6; Sharpe, P. Z. S. 1873, p. 715; Fischer & Reichenow, J. f. O. 1878, p. 281; Fischer, tom. cit. pp. 285, 291; id. J. f. O. 1879, pp. 281, 288, 302; Fischer & Reichenow, tom. cit. p. 350; id. J. f. O. 1880, p. 143.

Lamo; Usambara mountains.

This species is fairly plentiful throughout the Zanzibar province, and, according to M. Jules Verreaux, occurs in Senegal.

## 108. SYCOBROTUS MELANOXANTHUS.

*Hyphanturgus melanoxanthus*, Cab. J. f. O. 1878, pp. 205, 232; Fischer & Reichenow, tom. cit. p. 363.

Melinda.

The only other locality where this species has been collected is Mombas, where Hildebrandt procured the type, and where Dr. Fischer also met with it.

## 109. SYCOBROTUS NIGRICOLLIS.

*Sycobrotus nigricollis* (Vieill.), Finsch & Hartl. Vög. Ostafri. p. 405.

*Hyphanturgus nigricollis*, Cab. J. f. O. 1878, p. 232; Fischer & Reichenow, tom. cit. p. 263; Fischer, J. f. O. 1879, pp. 280, 288; Fischer & Reichenow, tom. cit. p. 350.

Lamo.

The type of *Ploceus nigricollis*, Vieill., was collected by Perrier in Angola; otherwise I only know of its occurrence on the Zauzibar coast, where it ranges from Lamo to Zanzibar Island.

## 110. PLOCEPASSER MAHALI.

*Philagrus melanorhynchus*, Smith, Cab. J. f. O. 1878, p. 232.

I have in my collection an adult male of this species, collected by Dr. Hildebrandt at Kitui, in Ukamba, in May 1877. I have compared it with South-African specimens from Matabili, Griqualand, and Benguela; and it agrees perfectly. It therefore appears evident to me that *Philagrus melanorhynchus*, Cab. (J. f. O. 1878, p. 232), refers to this species, and that *Plocepasser melanorhynchus*, Rüpp., has not yet been met with to the south of the White-Nile district.

## 111. QUELEA AETHIOPICA.

*Ploceus aethiopicus* (Sundev.), Finsch & Hartl. Vög. Ostafri. p. 409, note.

*Hyphantica aethiopica*, Fischer & Reichenow, J. f. O. 1879, p. 352.

Lamo; Ugogo.

This species ranges northward from Ugogo to about 18° N. lat.

## 112. EUPLECTES FLAMMICEPS.

*Pyromelana flammiceps*, Swains., Finsch & Hartl. Vög. Ostafri. p. 414.

*Euplectes flammiceps*, Cab. J. f. O. 1878, p. 231; Fischer & Reichenow, tom. cit. p. 263; Fischer, J. f. O. 1879, pp. 280, 282, 289, 303; Fischer & Reichenow, tom. cit. p. 351; Fischer, J. f. O. 1880, p. 187.

Melinda; Usambara hills; Usambara mountains.

It ranges over the greater portion of tropical Africa, being met with in East Africa from Abyssinia to Zanzibar, and on the west coast from Senegal to Angola.

## 113. EUPLECTES NIGRIVENTRIS.

*Pyromelana nigriventris* (Cass.), Finsch & Hartl. Vög. Ostafri. p. 415; Fischer, J. f. O. 1877, pp. 171, 179, 206, 208, 425, 426; Gurney, Ibis, 1881, p. 128.

*Euplectes nigriventris*, Sharpe, P. Z. S. 1873, p. 715; Nicholson, P. Z. S. 1878, p. 358; Cab. J. f. O. 1878, p. 231; Fischer & Reichenow, tom. cit. p. 264; Fischer, J. f. O. 1879, pp. 286, 303; Fischer, J. f. O. 1880, pp. 187, 190, 192.

Lamo; Pangani; Ugogo.

This species is confined to East Africa, where it ranges from Mombas to Mosambique.

## 114. EUPLECTES XANTHOMELAS.

*Pyromelana capensis* (part.), Finsch & Hartl. Vög. Ostafri. p. 416.

*Euplectes capensis*, Nicholson, P. Z. S. 1878, p. 358; Fischer & Reichenow, J. f. O. 1878, p. 264.

*Oryx xanthomelas* (Rüpp.), Cab. J. f. O. 1878, p. 231; Fischer & Reichenow, J. f. O. 1879, p. 351.

Lamo; Usambara mountains; Ugogo; Dar-es-Salaam.

Swainson records *E. capensis* from Senegal; and were it not that I doubt the authenticity of Swainson's locality, I should expect his bird to belong to the present species, which is known to range from Abyssinia, throughout East Africa, to Natal. The larger but closely allied *E. capensis* ranges from Natal and the Transvaal, throughout the western portion of South Africa, to Angola.

## 115. UROBRACHYA ZANZIBARICA, sp. n.

? *Penthetria axillaris*, Cab. J. f. O. 1878, p. 231; Fischer & Reichenow, tom. cit. p. 264; Fischer, tom. cit. p. 283; id. J. f. O. 1879, p. 286; Fischer & Reichenow, tom. cit. p. 351.

Lamo; Melinda; Pangani; Usambara mountains.

Similar in size and general plumage to *U. axillaris* (Smith), but differs in the far greater amount of rufous-brown on the primary- and greater wing-coverts; primary-coverts rufous-brown, only tipped with black; greater wing-coverts rufous-brown; the outer feather with the end and the end-half of the outer web black; about five of the inner greater coverts are black, edged with rufous-brown; and in the next three or four the black becomes limited to spots near the ends of the inner webs, the remaining five or six greater wing-coverts being entirely without any black portions.

Total length 6·5 inches, culmen 0·65, wing 3·5, tail 2·7, tarsus 1.

I have compared eight adult males of this species from the above localities with seven specimens of *U. axillaris* from Natal, and find the characters mentioned perfectly constant.

## 116. VIDUA PARADISEA.

*Vidua paradisea* (Linn.), Finsch & Hartl. Vög. Ostafri. p. 424.

*Vidua verreauxi*, Finsch & Hartl. tom. cit. p. 426; Fischer,

J. f. O. 1879, pp. 299, 303; Fischer & Reichenow, tom. cit. p. 351.

*Steganura sphenura*, Cab. J. f. O. 1878, p. 231.

Lamo; Ugogo; Dar-es-Salaam.

The characters of *V. verreauxii*, Cass., are, in my opinion, not of specific value. The range, therefore, of this species is from 17° N. lat. to 21° S. lat.

#### 117. VIDUA PRINCIPALIS.

*Vidua principalis* (Linn.), Finsch & Hartl. Vög. Ostafri. p. 428; Cab. J. f. O. 1878, p. 230; Fischer & Reichenow, tom. cit. p. 264; Fischer, J. f. O. 1879, pp. 280, 300, 303; Fischer & Reichenow, tom. cit. p. 351; Gurney, Ibis, 1881, p. 128.

*Vidua serena*, Fischer, J. f. O. 1878, p. 282.

Lamo; Pangani; Usambara hills; Usambara mountains; Dar-es-Salaam.

This species ranges throughout Africa south of about 16° N. lat.

#### 118. VIDUA SPLENDENS, Reichenow.

*Vidua splendens*, Reichenow, Orn. Centralbl. 1879, p. 180; Fischer, J. f. O. 1879, p. 300; Reichenow & Schalow, tom. cit. p. 326; Fischer & Reichenow, tom. cit. p. 352; Forbes, P. Z. S. 1880, p. 475, pl. 47, fig. 1.

Ugogo.

Besides the present locality this species is only known from Kibaraja, where the type was collected by Dr. Fischer.

#### 119. SPERMESTES CUCULLATUS.

*Spermestes cucullatus*, Swains., Finsch & Hartl. Vög. Ostafri. p. 436; Sharpe, P. Z. S. 1873, p. 715; Fischer, J. f. O. 1877, pp. 174, 178, 179, 206, 425, 426; Cab. J. f. O. 1878, p. 230; Fischer & Reichenow, tom. cit. p. 266; Fischer, J. f. O. 1879, pp. 286, 303; 1880, pp. 187, 193.

Pangani; Usambara mountains; Dar-es-Salaam.

This species ranges over the whole of Africa south of about 16° N. lat.

#### 120. HABROPYGA MINOR, Cab.

*Habropyga astrild*, Finsch & Hartl. Vög. Ost-Afr. p. 439; Fischer, J. f. O. 1877, p. 426.

*Habropyga minor*, Cab. J. f. O. 1878, p. 229; Fischer and Reichenow, J. f. O. 1878, p. 266.

Melinda; Pangani; Ugogo.

Nine specimens sent me by Dr. Kirk have the cheeks, chin, and throat whiter than in *H. astrild*, Linn. This appears to me to be the best-marked character for *H. minor*, Cab., which I cannot look upon as more than a local race of *H. astrild*, Linn.

With regard to *H. astrild* and its allies, they range throughout the African region south of about 18° N. lat., and the races possibly

as follows:—*H. minor*, North-east Africa southward to the Zambesi; *H. cinerea*, West Africa from Senegal to the Gaboon: *H. astrild*; South Africa, extending into West Africa northward to the Congo, and found as an introduced bird on many of the islands, as St. Helena and Mauritius.

#### 121. PITYLIA CINEREIGULA.

*Pitylia cinereigula*, Cab. J. f. O. 1878, pp. 101, 230; Fischer & Reichenow, tom. cit. p. 265; Fischer, tom. cit. p. 193.

Lamo; Dar-es-Salaam.

This species ranges from Lamo to Dar-es-Salaam, and is apparently confined to the Zanzibar province.

#### 122. LAGONOSTICTA MINIMA.

*Pytelia minima* (Vieill.), Finsch & Hartl. Vög. Ostafri. p. 444; Fischer & Reichenow, J. f. O. 1878, p. 265; Fischer, tom. cit. p. 282; id. J. f. O. 1879, pp. 280, 286.

*Lagonosticta minima*, Cab. J. f. O. 1878, p. 230; Fischer & Reichenow, J. f. O. 1878, p. 352.

Lamo; Usambara hills; Usambara mountains.

This species ranges in East Africa from about 10° N. lat. to the Transvaal, and on the west coast from Senegal to Damaland.

#### 123. LAGONOSTICTA POLIONOTA.

*Lagonosticta polionota*, Shelley, Cab. J. f. O. 1878, p. 230.

Dar-es-Salaam.

This species ranges in East Africa from Mombas to Dar-es-Salaam, and in West Africa from Fantee to the Loango coast.

#### 124. URÆGINTHUS PHÆNICOTIS.

*Pytelia phœnicotis* (Swains.), Finsch & Hartl. Vög. Ostafri. p. 447; Fischer & Reichenow, J. f. O. 1878, p. 265; Fischer, tom. cit. pp. 281, 282; id. J. f. O. 1879, p. 286.

*Estrelida cyanogastra*, Nicholson, P. Z. S. 1878, p. 358.

*Uræginthus phœnicotis*, Cab. J. f. O. 1871, p. 229.

*Mariposa phœnicotis*, Gurney, Ibis, 1881, p. 128.

Dar-es-Salaam.

This species ranges throughout Africa south of about 15° N. lat.

The oldest title of this bird is, I consider, *Fringilla bengalus*, Linn. S. N. i. p. 323; but that title should not be employed, as the species is not a native of Bengal.

#### 125. HYPARGUS NIVEIGUTTATUS. (Plate LII. fig. 2.)

*Spermophaga niveiguttata*, Peters, J. f. O. 1868, p. 133; Cab. J. f. O. 1878, p. 230.

*Hypargos niveiguttata*, Finsch & Hartl. Vög. Ostafri. p. 448; Fischer, J. f. O. 1879, p. 280.

Melinda; Usambara hills; Usambara mountains.

This rare Finch ranges from Ndi in the Uteita country southward

to Inhambane, near the mouth of the Limpopo, where the type was collected.

### 126. AMBLYOSPIZA UNICOLOR.

*Pyronestes albifrons*, Sharpe, P. Z. S. 1873, p. 715.

*Pyronestes unicolor*, Fischer & Reichenow, J. f. O. 1878, p. 264 ; Fischer, tom. cit. pp. 283, 354 ; id. J. f. O. 1879, pp. 280, 303 ; Fischer & Reichenow, tom. cit. p. 353 ; Fischer, J. f. O. 1880, p. 193.

Lamo ; Pangani ; Usambara mountains.

This species is confined to East Africa, where as yet it is only known of from the northern half of the Zanzibar province.

It differs from the South-African *P. albifrons* in its smaller size and darker colouring. The young, as in the South-African species, has the bill bright yellow, the plumage much paler and more rufous than in the adult, and the breast mottled with whitish.

### 127. PASSER SWAINSONI.

*Passer swainsoni* (Rüpp.), Finsch & Hartl. Vög. Ostafri. p. 450 (pt.) ; Fischer, J. f. O. 1877, p. 180 ; Fischer & Reichenow, J. f. O. 1878, p. 266 ; Fischer, tom. cit. p. 281 ; id. J. f. O. 1879, pp. 286, 302.

Melinda.

In Africa there are three closely allied species of Sparrows, which Drs. Finsch and Hartlaub (*loc. cit.*) unite as one. These are :—

*P. swainsoni*, Rüpp.

*P. gularis*, Less. (The title *P. simplex*, Licht., was misapplied to this species by Swainson.)

*P. diffusus*, Smith.

Collectively they range over the whole of Africa south of about 15° N. lat.

*P. swainsoni* inhabits the north-eastern region to as far south as Zanzibar ; *P. gularis*, West Africa, from Senegal to the Gold Coast ; *P. diffusus*, the whole of South Africa and the east coast northward to Lamo.

Although *P. swainsoni* and *P. diffusus* meet in East Africa, they preserve their identity, and therefore cannot, in my opinion, be regarded as mere races of one species.

### 128. PASSER DIFFUSUS, Smith.

*Passer diffusus*, Nicholson, P. Z. S. 1878, p. 358 ; Cab. J. f. O. 1878, p. 228 ; Fischer & Reichenow, J. f. O. 1880, p. 143.

Lamo ; Pangani ; Dar-es-Salaam.

### 129. CRITHAGRA CHRYSOPYGA.

*Crithagra butyracea*, Finsch & Hartl. Vög. Ostafri. p. 455 (part) ; Fischer, J. f. O. 1877, pp. 181, 206 : id. J. f. O. 1879, pp. 280, 300, 303.

*Crithagra chrysopyga* (Swains.), Sharpe, P. Z. S. 1873, p. 715; Fischer & Reichenow, J. f. O. 1878, p. 266.

Lamo ; Usambara hills.

This species ranges throughout South Africa and West Africa to as far north as Senegal. On the east coast it extends certainly as far north as Lamo, and probably considerably further in this direction ; but as yet I am unable to determine how much of Von Heuglin's *C. butyracea* may belong to this species.

### 130. COLIUS LEUCOTIS, Rüpp.

*Colius leucotis*, Finsch & Hartl. Vög. Ostafri. p. 472 ; Sharpe, P. Z. S. 1873, p. 714 ; Nicholson, P. Z. S. 1878, p. 358 ; Cab. J. f. O. 1878, p. 237 ; Fischer & Reichenow, tom. cit. p. 252 ; Fischer, tom. cit. pp. 269, 289, 290 ; id. J. f. O. 1879, pp. 282, 300, 303 ; Gurney, Ibis, 1881, p. 128.

Pangani ; Usambara mountains ; Dar-es-Salaam.

This species is confined to East Africa, where it ranges from about 10° N. lat. to Dar-es-Salaam.

### 131. GALLIREX CHLOROCHLAMYS.

*Corythaix porphyreolophus*, Finsch & Hartl. Vög. Ostafri. p. 473. *Gallirex chlorochlamys*, Shelley, Ibis, 1881, p. 118.

Ugogo ; Dar-es-Salaam.

Three specimens from the above localities I have made the types of this new species. It is the East-African representative of *G. porphyreolophus* (Vig.), from which latter bird it may be most readily distinguished by the absence of any red shade to the green of the lower neck, chest, and upper back ; while the lower back, median and lesser wing-coverts, and the secondaries are of a more ashy-blue shade.

### 132. TURACUS FISCHERI.

*Corythaix fischeri*, Fischer & Reichenow, J. f. O. 1878, p. 250, pl. 4. fig. 1 ; Fischer, tom. cit. pp. 290, 354 ; id. J. f. O. 1879, pp. 288, 291, 303 ; Fischer & Reichenow, tom. cit. p. 340 ; Fischer, J. f. F. 1880, p. 189.

Lamo ; Melinda ; Usambara mountains ; Rabbai near Mombas (Wakefield).

This species is confined to the Zanzibar province.

We now know of three species of *Turacus* with red on the crest ; and these may be readily distinguished in the following manner :—

- a. Greater portion of the crest and nape red. Some of the crest-feathers tipped with white.
- a'. No black loral band. Sides of the head white, or nearly so..... *erythrolophus*.
- b'. With a black loral band. Sides of the head grass-green. *fischeri*.
- b. Red on the crest confined to the tips of a few of the longer feathers. No white on the crest..... *meriani*.

## 133. SCHIZORHIS LEOPOLDI.

*Schizorhis leopoldi*, Shelley, Ibis, 1881, p. 117, pl. 2.

Ugogo.

Allied to *S. personatus*, Rüpp., from which it may be most readily distinguished by its having the bare skin of the face jet-black, no shade of green on the crest or under surface of the tail, and a much smaller patch of green on the lower portion of the throat.

## 134. BUCORVUS ABYSSINICUS (Bodd.).

*Tmetoceros abyssinicus*, Finsch & Hartl. Vög. Ostafri. p. 480.

*Buceros abyssinicus*, Fischer, J. f. O. 1879, p. 303.

*Bucorvus abyssinicus*, Elliot, Monogr. Bucerotidæ, part ii. (1877).

Usambara hills.

## 135. BYCANISTES CRISTATUS.

*Buceros cristatus*, Rüpp., Finsch & Hartl. Vög. Ostafri. p. 482 ; Fischer & Reichenow, J. f. O. 1880, p. 141.

*Bycanistes cristatus*, Elliot, Monogr. Bucerotidæ, part iii. (1877).

Usambara hills.

This species is confined to East Africa, ranging from Uganda (where it was collected by Captain Speke) to the Zambesi.

## 136. BYCANISTES BUCCINATOR.

*Buceros buccinator*, Temm., Finsch & Hartl. Vög. Ostafri. p. 484 ; Fischer & Reichenow, J. f. O. 1878, p. 254 ; Fischer, tom. cit. pp. 273, 289 ; id. J. f. O. 1879, p. 291 ; Fischer & Reichenow, J. f. O. 1880, p. 141.

*Bycanistes buccinator*, Elliot, Monogr. Bucerotidæ, part viii. (1880).

Melinda ; Usambara mountains.

Dr. Fischer procured it at Wito, its most northern known limit, whence it ranges southward to Natal and the Cape colony.

## 137. TOCCUS MELANOLEUCUS.

*Buceros melanoleucus*, Licht., Finsch & Hartl. Vög. Ostafri. p. 485 ; Fischer & Reichenow, J. f. O. 1878, p. 254 ; Fischer, tom. cit. p. 289 ; id. J. f. O. 1879, p. 291 ; Fischer & Reichenow, tom. cit. p. 343 ; id. J. f. O. 1880, p. 141.

*Tockus melanoleucus*, Nicholson, P. Z. S. 1878, p. 358 ; Elliot, Monogr. Bucerotidæ, part vii. (1880).

*Lophoceros melanoleucus*, Cab. J. f. O. 1878, p. 236.

Pangani ; Usambara mountains ; Dar-es-Salaam.

It ranges throughout South Africa, and on the east coast northward nearly to the equator, and on the west coast to Angola. It has also been recorded from Senegal on the authority of Mr. Warwick.

## 138. PEOCEPHALUS FUSCICAPILLUS.

*Pionias fuscicapillus* (Verr. & Des Murs), Finsch & Hartl. Vög. Ostafri. p. 499, pl. 7 ; Cab. J. f. O. 1878, p. 241 ; Fischer &

Reichenow, tom. cit. p. 251 ; Fischer, tom. cit. pp. 269, 286, 292 ; id. J. f. O. 1879, p. 303.

*Paeocephalus fuscicapillus*, Sharpe, P. Z. S. 1873, p. 711 ; Nicholson, P. Z. S. 1878, p. 358 ; Fischer, J. f. O. 1880, p. 188 ; Gurney, Ibis, 1881, p. 128.

Usambara mountains ; Ugogo ; Dar-es-Salaam.

This species ranges from Mombas to as far south as Swazi Land, in which latter locality it has been collected by Mr. T. E. Buckley.

#### 139. POGONORHYNCHUS IRRORATUS.

*Pogonorhynchus torquatus*, Finsch & Hartl. Vög. Ostafri. p. 503 ; Heugl. Orn. N.O.-Afr. p. 756 ; Sclat. P. Z. S. 1864, p. 112 ; Sharpe, P. Z. S. 1873, p. 711 ; Fischer, J. f. O. 1879, pp. 283, 291.

*Pogonorhynchus irroratus*, Cab. J. f. O. 1878, pp. 205, 239 ; Fischer & Reichenow, tom. cit. p. 253 ; Fischer, tom. cit. p. 292 ; Gurney, Ibis, 1881, p. 128.

Lamo ; Melinda ; Usambara mountains ; Ugogo ; Dar-es-Salaam.

This species ranges from Lamo to Dar-es-Salaam. It is represented in South Africa by the closely allied *P. torquatus* (Dumont).

#### 140. POGONORHYNCHUS MELANOPTERUS.

*Pogonorhynchus melanopterus* (Peters), Finsch & Hartl. Vög. Ostafri. p. 504 ; Marshall, Monogr. Cap. p. 13, pl. 7 ; Nicholson, P. Z. S. 1878, p. 359 ; Cab. J. f. O. 1878, p. 239 ; Fischer & Reichenow, tom. cit. p. 253 ; Fischer, tom. cit. p. 292 ; id. J. f. O. 1879, p. 291 ; Fischer & Reichenow, tom. cit. p. 342.

Lamo ; Pangani ; Usambara hills ; Usambara mountains ; Ugogo.

It ranges from Lamo to the Mosambique, and has been recorded from West Africa ; but I think there may be doubts as to the correctness of this latter locality. One specimen from the Usambara hills, apparently an immature bird, has rather less red on the head, the back and the front of the chest are rather darker, the bill is a little shorter, and there is no tooth on the upper mandible.

#### 141. POGONORHYNCHUS ALBICAUDA.

*Pogonorhynchus albicauda*, Shelley, Ibis, 1881, p. 117.

*Pogonorhynchus leucocephalus*, Cab. J. f. O. 1878, p. 239.

Ugogo.

A single specimen is all we possess of this species. It is allied to *P. leucocephalus* (Defil.) ; but may be readily distinguished by its white tail.

#### 142. TRACHYPHONUS CAFER.

*Trachyphonus cafer* (Vieill.), Marshall, Monogr. Cap. p. 139, pl. 56.

Ugogo.

The present species was hitherto only known as a native of South Africa, where it appears as rather a scarce bird, excepting in the Matabili country and the northern portion of the Transvaal.

## 143. BARBATULA OLIVACEA.

*Barbatula olivacea*, Shelley, Ibis, 1880, p. 334, pl. 7.

Rabbai, near Mombas (*Wakefield*).

I procured a single specimen, the type, out of a small collection made by the Rev. T. Wakefield. This species may be easily recognized by its general olive colour only shading into black on the front of the head.

## 144. PICUS NUBICUS.

*Picus nubicus*, Gm., Finsch & Hartl. Vög. Ostafri. p. 509; Fischer & Reichenow, J. f. O. 1878, p. 253; Fischer, tom. cit. p. 292; id. J. f. O. 1879, p. 289.

*Ipagrus nubicus*, Cab. J. f. O. 1878, p. 239.

Lamo.

This species is confined to East Africa, where it ranges from 20° N. lat. in Nubia to Mombas.

## 145. DENDROBATES SCHOËNSIS.

*Picus schoënsis*, Rüpp., Fischer & Reichenow, J. f. O. 1879, p. 343.

Ugogo.

Dr. Fischer collected this species at Muniuni. It ranges in East Africa from Ugogo to about 10° N. lat. In South Africa it is represented by the closely allied *D. namaqueus*.

## 146. PICUS FULVISCAPUS.

*Picus hartlaubi*, Finsch & Hartl. Vög. Ostafri. p. 512; Sharpe, P. Z. S. 1873, p. 711; Fischer, J. f. O. 1877, p. 207; Fischer & Reichenow, J. f. O. 1878, p. 254; Fischer, tom. cit. p. 292.

*Ipoctonus hartlaubi*, Cab. J. f. O. 1878, p. 238.

*Dendropicus fulvsicapus*, Ill., Gurney, Ibis, 1879, p. 298.

Pangani; Usambara hills; Usambara mountains; Ugogo; Dar-es-Salaam.

This species ranges throughout Africa south of 40° S. lat.

## 147. INDICATOR VARIEGATUS, Less.

*Indicator variegatus*, Sharpe, new ed. Layard's B. S. Afr. p. 167; Fischer & Reichenow, J. f. O. 1879, p. 342.

Usambara hills.

Dr. Fischer collected this species at Ualimi; and Mr. Sharpe (*l. c.*) records it from Mombas. It ranges through East and South Africa, from Mombas to the Knysna in Cape Colony.

## 148. CUCULUS POLIOCEPHALUS, Lath.

a. Lamo (*Kirk*); b. Durban (*Gordge*).

The two specimens from Africa are unfortunately both immature; but their small size prevents me from referring them to any hitherto described member of this group from Africa. They agree, however, exactly with an immature specimen of *C. poliocephalus* in Mr. See-

bohm's collection; and I think that the following measurements prove their specific identity:—

	Total length. in.	Culmen. in.	Wing. in.	Tail. in.
a. Lamo .....	9·5	0·65	5·9	5·4
b. Durban .....	10	0·65	5·65	5
c. Juv., Sikkim ..	9·5	0·60	5·8	5·7
d. Ad., Sikkim ..	9·3	0·70	5·75	5·2
e. Madagascar....	11	0·70	6·8	6·3

#### 149. COCCYSTES JACOBINUS (Bodd.).

*Coccystes jacobinus*, Sharpe, P. Z. S. 1873, pp. 597, 711; Nicholson, P. Z. S. 1878, p. 359; Gurney, Ibis, 1881, p. 128.

*Coccystes pica*, Cab. J. f. O. 1878, p. 238; Fischer, J. f. O. 1879, p. 303; Fischer & Reichenow, tom. cit. p. 342.

Usambara mountains.

I also possess a specimen from East Africa, collected by the late Mr. E. C. Buxton at Dar-es-Salaam.

This species ranges throughout East and South Africa. Its northern limit on the east coast is the Anseba valley, 16° N. lat., while on the west coast it has not been met with north of Biballa in Benguela.

#### 150. COCCYSTES AFER.

*Coccystes afer* (Licht.), Sharpe, P. Z. S. 1873, p. 596.

Usambara hills; Usambara mountains; Dar-es-Salaam.

This species ranges from the White-Nile district along the east coast to South Africa, and thence on the west coast to as far north as Sierra Leone.

#### 151. COCCYSTES ALBONOTATUS, sp. n.

? *Coccystes serratus*, Cab. J. f. O. 1878, p. 237; Fischer & Reichenow, tom. cit. p. 252; Fischer, tom. cit. p. 291.

Usambara hills.

Very similar to *C. serratus*, Sparrm., from which it differs in having a large white spot on the outer webs of the two pairs of lateral tail-feathers, in the under tail-coverts being broadly tipped with white, and in its rather larger dimensions. Total length 14·8 inches, culmen 1·1, wing 6·5, tail 9, tarsus 1·15.

Mr. Gurney first pointed out to me the necessity of separating this species from the South-African *C. serratus*, and writes:—"My specimen from Mombas exactly agrees with your description. The measurements of my bird are as follows—culmen 0·9 inch, wing 6·7, tail 8·9, tarsus 1·2.

#### 152. CHRYSOCOCCYX CUPREUS.

*Chrysococcyx cupreus* (Bodd.), Finsch & Hartl. Vög. Ostafri. p. 522; Fischer, J. f. O. 1877, pp. 180, 424, 425; Cab. J. f. O. 1878, p. 237; Fischer & Reichenow, tom. cit. p. 252; Fischer, tom.

cit. p. 291; id. J. f. O. 1879, pp. 287, 303; Fischer & Reichenow, tom. cit. p. 342; Fischer, J. f. O. 1880, p. 190.

Lamo; Pangani; Usambara hills; Usambara mountains.

A common bird throughout the Zanzibar province. I also possess specimens collected by the Rev. T. Wakefield at Rabbai near Mombas, and by the late Mr. E. C. Buxton at Dar-es-Salaam.

It inhabits the whole of Africa south of about 16° N. lat.

### 153. CEUTHMOCHARIS AUSTRALIS, Sharpe.

*Zanclostomus æreus*, Finsch & Hartl. Vög. Ostafri. p. 525 (part); Fischer, J. f. O. 1880, p. 192.

*Ceuthmocharis australis*, Cab. J. f. O. 1878, p. 238.

*Zanclostomus australis*, Fischer, J. f. O. 1879, pp. 283, 289, 393; Fischer & Reichenow, tom. cit. p. 342.

Lama.

This species ranges throughout South and East Africa to as far north as Lamo. In West Africa it is replaced by the nearly allied *C. cæneus*.

### 154. CENTROPUS SUPERCILIOSUS.

*Centropus senegalensis*, Finsch & Hartl. Vög. Ostafri. p. 527, part.

*Centropus superciliatus*, Hempr. & Ehr., Fischer, J. f. O. 1877, pp. 172, 175; Nicholson, P. Z. S. 1878, p. 359; Cab. J. f. O. 1878, p. 238; Fischer & Reichenow, tom. cit. p. 252; Fischer, tom. cit. p. 290; id. J. f. O. 1879, p. 282; Fischer & Reichenow, tom. cit. p. 341; Fischer, tom. cit. p. 192.

Pangani.

This species ranges in East Africa from about 19° N. lat. to Dar-es-Salaam, and on the west coast has been collected in Angola.

### 155. TRERON DELALANDII.

*Treron delalandii* (Bp.), Finsch & Hartl. Vög. Ostafri. p. 535; Nicholson, P. Z. S. 1878, p. 359; Fischer & Reichenow, J. f. O. 1878, p. 250; Fischer, tom. cit. p. 293.

Ugogo.

The most northern limit as yet known for this species is Mombas, whence it has been recorded by Drs. Fischer and Reichenow, *l. c.* It ranges southward to Natal and Kaffraria.

### 156. TRERON WAKEFIELDI.

*Treron wakefieldi*, Sharpe, P. Z. S. 1873, p. 715, pl. 58. fig. 2; Fischer, J. f. O. 1879, p. 291; Fischer & Reichenow, tom. cit. p. 339; Gurney, Ibis, 1881, p. 128.

Lamo; Usambara mountains.

This species is as yet only known from the restricted region of the northern portion of the Zanzibar province between Lamo and the Pangani river. The characters given for this species by Mr. Sharpe *l. c.* are well marked in the five specimens before me.

## 157. TURTUR SEMITORQUATUS.

*Turtur semitorquatus*, Rüpp., Finsch & Hartl. Vög. Ostafri. p. 541 ; Sharpe, P. Z. S. 1873, p. 715 ; Fischer, J. f. O. 1877, p. 208 ; Fischer & Reichenow, J. f. O. 1878, p. 250 ; Fischer, J. f. O. 1879, pp. 300, 303.

Dar-es-Salaam.

This species ranges throughout Africa south of about 14° N. lat.

## 158. TURTUR CAPICOLA (Sund.).

*Turtur capicola*, Finsch & Hartl. Vög. Ostafri. p. 548 ; Fischer, J. f. O. 1877, p. 208 ; Fischer & Reichenow, J. f. O. 1878, p. 250 ; Fischer, tom. cit. p. 292, 1879, p. 300.

*Turtur albiventris*, Sharpe, P. Z. S. 1873, p. 715.

*Turtur damarensis*, Cab. J. f. O. 1878, p. 242.

Pangani ; Usambara mountains ; Ugogo ; Dar-es-Salaam.

I cannot venture to define the full range of this species until I have had more time to study the African members of the genus *Turtur* ; but the present bird undoubtedly inhabits the whole of South Africa, and ranges northward along the east coast to Mombas, and is plentiful on the Comoro Islands.

## 159. TURTUR LUGENS.

*Turtur lugens* (Rüpp.), Hengl. Orn. N.O.-Afr. p. 838.

Pangani.

The present species is here recorded from the East-African region for the first time. It ranges from Abyssinia to the Pangani valley. The specimen before me agrees perfectly with one collected by Sir W. C. Harris at Ankober in Abyssinia, now in the British Museum.

## 160. CHALCOPELIA AFRA.

*Chalcopelia afra* (Linn.), Finsch & Hartl. Vög. Ostafri. p. 554 (part) ; Sharpe, P. Z. S. 1873, p. 716 ; Fischer, J. f. O. 1877, pp. 173, 175, 176, 207, 208 ; Fischer & Reichenow, J. f. O. 1878, p. 250 ; Fischer, tom. cit. p. 292 ; id. J. f. O. 1879, pp. 300, 303 ; Fischer & Reichenow, tom. cit. p. 339 ; Fischer, J. f. O. 1880, p. 192.

Pangani ; Usambara mountains.

Drs. Finsch and Hartlaub unite as one species the specimens with metallic green and with metallic blue spots on the wings ; but in the present list it is undoubtedly best to treat them as distinct species, although I am unable to define their separate geographical distribution. Collectively they range throughout Africa south of about 17° N. lat.

## 161. CHALCOPELIA CHALCOSPILOS.

*Chalcopelia afra*, Finsch & Hartl. Vög. Ostafri. p. 554, part.

*Chalcopelia chalcospilos* (Wagl.), Cab. J. f. O. 1878, p. 243.

Lamo ; Usambara hills ; Usambara mountains ; Dar-es-Salaam,

162. *OENA CAPENSIS.*

*Oena capensis* (Linn.), Finsch & Hartl. Vög. Ostafri. p. 557; Sharpe, P. Z. S. 1873, p. 716; Cab. J. f. O. 1878, p. 243.

Lamo; Pangani.

It ranges throughout Africa south of about 15° N. lat., occasionally extending, probably as a straggler, somewhat further north; for Mr. Dresser has kindly presented me with a specimen collected by Mr. Zohrab at Jeddah, about lat. 22° N. lat., on the Asiatic side of the Red Sea.

163. *PERISTERA TYMPANISTRIA.*

*Peristera tympanistria* (Temm.), Finsch & Hartl. Vög. Ostafri. p. 558; Fischer, J. f. O. 1877, pp. 173, 176; Cab. J. f. O. 1878, p. 243; Fischer & Reichenow, tom. cit. p. 250; Fischer, tom. cit. pp. 292, 293.

*Chalcopelia tympanistria*, Fischer, J. f. O. 1879, p. 300.

Pangani.

It ranges throughout South Africa, and extends northward in East Africa to Mombas, and in West Africa to the Gold Coast.

164. *NUMIDA PUCHERANI.*

*Numida pucherani*, Hartl., Finsch & Hartl. Vög. Ostafri. p. 574; Elliot, Monogr. Phasianidæ, ii. pl. 46; Fischer & Reichenow, J. f. O. 1878, p. 250; Fischer, tom. cit. pp. 293, 294; id. J. f. O. 1879, pp. 284, 300; Fischer & Reichenow, J. f. O. 1880, p. 140; Scl. P. Z. S. 1880, p. 539.

*Numida ellioti*, Bartlett, P. Z. S. 1877, p. 652, pl. 65.

*Guttura pucherani*, Cab. J. f. O. 1878, p. 244.

Meliinda; Pangani.

This species is confined to East Africa, and is apparently the commonest Guineafowl on the Zanzibar coast, while, according to Dr. Kirk, it is plentiful along the Zambezi.

165. *FRANCOLINUS NUDICOLLIS.*

*Francolinus nudicollis* (Gm.), Fischer, J. f. O. 1879, p. 284; Fischer & Reichenow, tom. cit. p. 339.

Dar-es-Salaam.

This species was first collected in East Africa by Dr. Fischer at Kipini.

166. *FRANCOLINUS GRANTI.*

*Francolinus grantii*, Hartl., Finsch & Hartl. Vög. Ostafri. p. 589; Nicholson, P. Z. S. 1878, p. 359; Fischer, J. f. O. 1879, pp. 284, 300, 303; Fischer & Reichenow, tom. cit. p. 339.

*Scleroptera granti*, Cab. J. f. O. 1878, p. 243.

Melinda; Dar-es-Salaam.

The present species is apparently confined to East Africa, where it ranges from Mombas to Tete on the Zambezi. According to Dr. Hildebrandt it is abundant about Mombas in the Uteita country;

and as I have received it both from Dr. Kirk and the late Mr. E. C. Buxton from Dar-es-Salaam, it is probably fairly evenly distributed throughout the Zanzibar province.

#### 167. TURNIX LEPURANA.

*Turnix lepurana* (Smith), Finsch & Hartl. Vög. Ostafri. p. 593 ; Fischer & Reichenow, J. f. O. 1878, p. 249 ; Fischer, tom. cit. p. 293 ; id. J. f. O. 1879, p. 284 ; Fischer & Reichenow, tom. cit. p. 339 ; Fischer, J. f. O. 1880, p. 188.

*Ortygis lepurana*, Cab. J. f. O. 1878, p. 243.

Lamo.

From Kordofan it ranges southward throughout East and South Africa. On the west coast I am unable accurately to determine its limits ; but it is certainly a common bird in Fantee, and is probably distributed throughout this region from Senegal to Angola.

Dr. Fischer found it breeding on Zanzibar Island and at Formosa Bay, and he gives a description of the eggs.

#### 168. EDICNEMUS VERMICULATUS.

*Edicnemus vermiculatus*, Cab., Finsch & Hartl. Vög. Ostafri. p. 622 ; Cab. J. f. O. 1878, p. 245 ; Fischer, J. f. O. 1879, p. 303 ; Fischer & Reichenow, tom. cit. p. 338.

Usambara mountains.

This species ranges from Mombas southward throughout East and South Africa.

#### 169. CURSORIUS SENEGALENSIS (Licht.).

Melinda.

This species ranges throughout Africa south of about 15° N. lat. It is here recorded for the first time from East Africa.

#### 170. GLAREOLA PRATINCOLA.

*Glareola pratincola* (Linn.), Finsch & Hartl. Vög. Ostafri. p. 630.

Melinda.

The Common Pratincole ranges throughout Africa.

#### 171. CHETTUSIA INORNATA.

*Chettusia inornata* (Swains.), Fischer & Reichenow, J. f. O. 1880, p. 139.

Melinda.

I cannot attempt to define the range of this species, as there appears to me to be much confusion in the nomenclature. The present species is closely allied to *C. melanoptera* (Rüpp.), from which it may be readily distinguished by its smaller size, longer tarsus, black legs, and in the bar on the tail not extending onto the two outer feathers on each side, which are entirely white.

Dr. Fischer first collected this bird in East Africa, on the island of Zanzibar.

## 172. DROMAS ARDEOLA.

*Dromas ardeola*, Paykull, Finsch & Hartl. Vög. Ostafri. p. 627.

Dar-es-Salaam.

It ranges throughout the whole of the East-African coast from Natal to Massuah on the Red Sea, and also inhabits Madagascar and the Seychelles Islands.

## 173. ARDEA MELANOCEPHALA.

*Ardea melanocephala*, Vig., Finsch & Hartl. Vög. Ostafri. p. 680; Fischer, J. f. O. 1879, pp. 284, 295, 297; Gurney, Ibis, 1881, p. 128.

Usambara hills.

It inhabits the entire Ethiopian region south of 14° N. lat.

## 174. HERODIAS INTERMEDIA (Wagl.).

*Ardea intermedia*, Finsch & Hartl. Vög. Ostafri. p. 686.

? *Ardea alba*, Fischer, J. f. O. 1879, pp. 295, 295.

Usambara hills.

It inhabits Africa south of 15° N. lat. To the north, at least along the shores of the Mediterranean, it is, I believe, entirely replaced by the larger form *H. alba* (Linn.).

## 175. HERODIAS GARZETTA.

*Ardea garzetta* (Linn.), Finsch & Hartl. Vög. Ostafri. p. 687; Fischer, J. f. O. 1879, pp. 295, 297.

Usambara hills.

This species ranges throughout the entire Ethiopian region.

## 176. BUBULCUS IBIS (Linn.).

*Ardea bubulcus*, Finsch & Hartl. Vög. Ostafri. p. 694.

*Bubulcus ibis*, Cab. J. f. O. 1878, p. 245.

Usambara hills.

It inhabits the entire Ethiopian region.

## 177. ARDETTA STURMI.

*Ardea sturmi*, Wagl., Finsch & Hartl. Vög. Ostafri. p. 704.

Pangani.

It inhabits the entire Ethiopian Region south of about 15° N. lat., but is here recorded for the first time from the Zanzibar province.

## 178. ARDETTA MINUTA (Linn.).

*Ardea minuta*, Finsch & Hartl. Vög. Ostafri. p. 705.

*Ardea podiceps*, Finsch & Hartl. tom. cit. p. 708.

*Ardetta pusilla*, Cab. J. f. O. 1878, p. 245.

*Botaurus minutus*, Fischer & Reichenow, tom. cit. p. 249.

*Botaurus pusillus*, Fischer & Reichenow, loc. cit.

Pangani.

I have given above references to both *Ardetta minuta* (Linn.) and *A. pusillu* (Vieill.), as they are so closely allied that I consider

their specific separation unnecessary. The two specimens sent to me by Dr. Kirk from Pangani I should refer to the true *A. minuta*. Both forms, according to Dr. Fischer, occur on the island of Zanzibar. Collectively they range throughout the Ethiopian Region.

#### 179. SCOPUS UMBRETTA.

*Scopus umbretta*, Gm., Finsch & Hartl. Vög. Ostafri. p. 727; Cab. J. f. O. 1878, p. 245; Fischer & Reichenow, tom. cit. p. 249; Fischer, tom. cit. p. 295; id. J. f. O. 1879, pp. 284, 296, 297, 301; Fischer & Reichenow, tom. cit. p. 339.

Usambara hills.

This species ranges throughout the Ethiopian region south of about 15° N. lat.

#### 180. IBIS AETHIOPICA.

*Ibis aethiopica* (Lath.), Finsch & Hartl. Vög. Ostafri. p. 733; Fischer & Reichenow, J. f. O. 1878, p. 248; Fischer, tom. cit. p. 295; id. J. f. O. 1879, pp. 295, 296.

Usambara hills.

I may here mention that I have recently received from M. Filippini an Egyptian specimen shot on Lake Mensala, in the Delta; so that this species is now known to range in Africa from the mouth of the Nile to the Cape of Good Hope, and on the west coast as far north as the Senegal river.

#### 181. GERONTICUS HAGEDASH.

*Ibis hagedash* (Lath.), Finsch & Hartl. Vög. Ostafri. p. 735; Fischer, J. f. O. 1879, pp. 295, 296.

*Ibis caffrensis*, Fischer & Reichenow, J. f. O. 1878, p. 248.

Usambara hills.

It ranges throughout Africa south of the line, and northward in Western Africa to the river Gambia.

#### 182. TOTANUS CANESCENS.

*Totanus canescens* (Gm.), Finsch & Hartl. Vög. Ostafri. p. 745.

Usambara mountains.

It ranges throughout the whole of Africa.

#### 183. CALIDRIS ARENARIA.

*Calidris arenaria* (Linn.), Finsch & Hartl. Vög. Ostafri. p. 767.

Lamo.

It inhabits the entire Ethiopian Region.

#### 184. RHYNCHÆA CAPENSIS.

*Rhynchæa capensis* (Linn.), Finsch & Hartl. Vög. Ostafri. p. 774.

Lamo.

Although here recorded for the first time from the Zanzibar region, it ranges throughout the whole of Africa and Madagascar.

185. *LIMNOCORAX NIGER*.

*Ortygometra nigra* (Gm.), Finsch & Hartl. Vög. Ostafri. p. 779; Fischer & Reichenow, J. f. O. 1878, p. 248; Fischer, tom. cit. p. 295; id. J. f. O. 1879, pp. 297, 303; Fischer, J. f. O. 1880, p. 188.

*Limnocorax mosambicus*, Cab. J. f. O. 1878, p. 246.

Pangani; Dar-es-Salaam.

This species inhabits the whole of Africa south of about  $13^{\circ}$  N. lat., and on the west coast extends a few degrees further north, to the river Senegal.

186. *METOPIDIUS AFRICANUS*.

*Parra africana* (Gm.), Finsch & Hartl. Vög. Ostafri. p. 781; Fischer & Reichenow, J. f. O. 1878, p. 248; Fischer, tom. cit. p. 295; Fischer, J. f. O. 1879, pp. 297, 303; Fischer & Reichenow, tom. cit. p. 338; Fischer, J. f. O. 1880, p. 188.

Pangani.

It inhabits the whole of Africa south of about  $15^{\circ}$  N. lat.

187. *GALLINULA ANGULATA*.

*Gallinula pumila*, Sclat. Ibis, 1859, p. 249, pl. 7.

Dar-es-Salaam.

New to East Africa. This species ranges throughout South Africa, and extends northward on the west coast to Senegal and on the east coast to Dar-es-Salaam.

188. *SARCIDIORNIS AFRICANUS*.

*Sarcidiornis melanotus* (Penn.), Finsch & Hartl. Vög. Ostafri. p. 799; Fischer, J. f. O. 1879, p. 296.

Melinda.

This species ranges throughout the Ethiopian Region south of about  $15^{\circ}$  N. lat.

189. *NETTAPUS AURATUS*.

*Nettapus auratus* (Bodd.), Finsch & Hartl. Vög. Ostafri. p. 804; Fischer & Reichenow, J. f. O. 1878, p. 248; Fischer, tom. cit. p. 296; id. J. f. O. 1879, p. 285.

Lamo.

It ranges throughout the whole of the southern Ethiopian Region, and extends northward on the east coast to Lamo, and in West Africa to Senegal.

190. *DENDROCYGNA VIDUATA*.

*Dendrocygna viduata* (Linn.), Finsch & Hartl. Vög. Ostafri. p. 806; Fischer & Reichenow, J. f. O. 1878, p. 248; Fischer, tom. cit. p. 295; id. J. f. O. 1879, pp. 295, 296.

Ugogo.

This species ranges throughout the Ethiopian Region south of about  $16^{\circ}$  N. lat.

## 191. PODICEPS MINOR.

*Podiceps minor* (Linn.), Finsch & Hartl. Vög. Ostafri. p. 811; Fischer, J. f. O. 1880, p. 188.

*Colymbus minor*, Fischer & Reichenow, J. f. O. 1878, p. 247; Fischer, J. f. O. 1879, p. 297.

Paugani.

This species is to be found throughout the whole of the Ethiopian Region.

## 192. THALACROCORAX AFRICANUS.

*Graculus africanus* (Gm.), Finseh & Hartl. Vög. Ostafri. p. 847; Fischer & Reichenow, J. f. O. 1878, p. 247; Fischer, tom. cit. p. 295.

Usambara hills.

The range of this species is probably the entire Ethiopian Region south of 30° N. lat.; for it is not uncommon on Lake Fayoom near Cairo; but its northern limits on the west coast are not yet so well defined.

7. On a Collection of Lepidoptera from Western India, Beloochistan, and Afghanistan. By ARTHUR G. BUTLER, F.L.S., F.Z.S., &c. Assistant Keeper, Zoological Department, British Museum.

[Received March 28, 1881.]

The collection, of which the following is an account, was received last year, in two consignments, from Major Charles Swinhoe. The first of these was accompanied by a letter dated from Kurrachee 1st May, 1880, in which Major Swinhoe says:—"I send you by this mail another small collection of Lepidoptera in three small boxes. . . . I am afraid there is not much in it you will care for. I have several boxes full of Butterflies and Moths in paper envelopes, but cannot find time to sort them. Mr. Murray, the Curator of the Kurrachee Museum, has gone to Kandahar at his and my expense; and when happier times come I will send you his Afghan collections. One small box I have looked into is very much like a collection from England would be, or rather, I should say, from Europe; it contained *Pieris rapæ*, *P. mesentina*, *Colias chrysostheme*<sup>1</sup>, *Pieris daplidice*, *Lycæna cyllarus*, one pair of Nymphalidæ I don't know, *Deiopeia pulchella*, and *Grammodes stolida*: I hope the others will show a greater variety. Mr. Murray's tour will extend over three months; and therefore his notes and his collection should be valuable; but I am afraid that he will not be able to get beyond Khelat i Gilgai.

"I send you a few notes made during the past year of what my

<sup>1</sup> By this is intended *C. erate*; some of the others, as *L. cyllarus*, are doubtless identified from memory.